FINAL

Technical Support Document for the Notice of Final Rulemaking on Finding of Failure to Attain and Denial of Attainment Date Extension for Ozone in the Phoenix (Arizona) Metropolitan Area

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Air Division

U.S. Environmental Protection Agency - Region 9

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TSD for the Phoenix Ozone Reclassification

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A. Background

40 CFR § 50.9 states that the National Ambient Air Quality Standard (NAAQS) for ozone is attained when the expected number of days per calender year with maximum hourly average ozone concentrations above 0.12 parts per million (ppm) is equal to or less than one, as determined by 40 CFR Part 50, Appendix H. The number of exceedances of the ozone NAAQS at a monitoring site is recorded for each calender year and is then averaged over a three-year period to determine if this average is less than or equal to one.

The expected number of exceedances, which is basically an arithmetic average, is simple to calculate if a monitoring site has a complete data set for each year, i.e. 365 daily maximum hourly average values. If there are days that do not have a valid value, it is necessary to estimate the number of exceedances per year based on the equation described in section 3 of Appendix H. However, if a monitoring site has recorded two or more exceedances of the NAAQS in each year of the three-year period, this estimation procedure is not necessary because the area will clearly not be in attainment of the NAAQS.

The determination of the Phoenix Planning Area's attainment status for ozone is based on monitoring data collected during the years 1994 through 1996. There are eight monitors that make up the ozone State and Local Air Monitoring Station/National Air Monitoring Station (SLAMS/NAMS) network in the Phoenix Planning Area. These monitoring sites are operated by Maricopa County. Table 1 provides the four highest ozone concentrations during the 1994-1996 period for each of the monitors in the Phoenix Planning Area's SLAMS/NAMS network.

In addition to the SLAMS/NAMS network there is a supplementary network of special purpose monitors (SPM) operated by Maricopa County and the Arizona Department of Environmental Quality (ADEQ). Some of the County's SPMs were originally set up to address network deficiencies cited by U.S. EPA in two program evaluations conducted in 1989 and 1992 ("Evaluation of Maricopa County Air Quality Program", September 1989 and "Re-Evaluation of the Maricopa County Air Quality Program", July 1992). Other SPMs are established by the County on a temporary basis in order to further assess the adequacy of their SLAMS/NAMS network and may only operate for one ozone season in a particular location. If the County finds that a temporary SPM addresses a monitoring objective that was previously lacking in the network, that SPM becomes a candidate for SLAMS designation. ADEQ also operates SPMs to validate air quality modeling results and for other air quality characterization studies. Most of these sites were established between the years 1989 through 1997 and some operate only on a seasonal basis. All of the County's and ADEQ's SPM sites meet the monitoring criteria and quality assurance requirements of 40 CFR Part 58 (§58.13, §58.22, Appendices A, C, and E). Since these

Table 1 Ozone SLAMS/NAMS Monitors in Phoenix Planning Area					
Site Name	**Monitor Type**	**1st High (ppm)**	**2nd High (ppm)**	**3rd High (ppm)**	**4th High (ppm)**
South Phoenix	SLAMS	0.142 8/31/95	0.124 5/11/96	0.119 7/26/96	0.110 5/12/96
West Phoenix	SLAMS	0.120 8/31/95	0.117 9/1/95	0.115 8/29/95	0.110 5/11/96
Mesa	SLAMS	0.127 9/1/95	0.127 8/29/95	0.127 7/23/96	0.126 8/2/95
North Phoenix	SLAMS	0.142 8/31/95	0.132 7/29/94	0.129 8/29/95	0.125 9/1/95
Glendale	SLAMS	0.117 7/29/94	0.115 6/12/95	0.109 7/20/94	0.109 8/1/95
Pinnacle Peak	SLAMS	0.138 6/28/94	0.123 8/10/95	0.120 9/22/94	0.119 7/28/95
Central Phoenix	NAMS	0.123 8/10/95	0.119 8/31/95	0.113 9/1/94	0.113 8/29/95
South Scottsdale	NAMS	0.128 8/31/95	0.123 8/4/94	0.123 10/27/95	0.121 7/29/94

Source: AIRS/AQS

sites are not part of the official SLAMS/NAMS network, the County and State are not required to enter data to the Aerometric Information Retrieval System/Air Quality Subsystem (AIRS/AQS) database. This is in contrast to the SLAMS/NAMS data which are reported to the AIRS/AQS database on a quarterly basis. Therefore, EPA has limited data from these SPM sites. Information on the monitoring sites and the highest concentrations (as available) are contained in Table 2 below.

Table 2 Ozone Special Purpose Monitors in the Phoenix Planning Area					
Site	**Established**	**1st high (ppm)**	**2nd high (ppm)**	**3rd high (ppm)**	**4th high (ppm)**
Falcon Field	1989	0.139 7/23/96	0.134 8/2/95	0.130 7/8/95	0.130 8/4/94
Blue Point	1995	0.140 7/23/96	0.132 8/16/96	0.123 6/4/96	0.118 5/21/96
Papago Park	1994	0.144 8/31/95	0.139 9/1/95	0.133 8/29/95	0.132 8/7/95
Fountain Hills	1996	0.132 8/28/96	0.129 7/23/96	0.128 5/21/96	0.126 6/4/96
Maryvale	1993	Not available	Not available	Not available	Not available
Mount Ord[2]	1995	0.137 8/31/95	0.130 5/21/96	0.126 8/2/95	Not available
West Chandler	1993	0.125 8/12/95	Not available	Not available	Not available
Salt River Pima	1993	0.130 7/6/95	0.127 9/1/95	0.124 8/2/95	0.122 8/7/95
Vehicle Emission Lab	Not available	0.135 7/29/94	0.133 8/31/95	0.130 9/1/95	0.129 8/29/95
Supersite	Not available	0.143 8/31/95	0.138 7/29/94	0.129 9/1/95	Not available

Source: ADEQ

B. Determination of Attainment/Nonattainment

Determining the attainment status for the Phoenix Planning Area is based on the average number of ozone exceedances which occurred in the area during the years 1994 through 1996. If a monitoring site averages more than one exceedance per year over a three-year period, that site has not attained the ozone standard and therefore the entire area has failed to attain the ozone standard.

In its simplest case, the average number of exceedances at a given monitoring site during the three-year period is calculated by adding the total number of exceedances for each year and then dividing by three. However, there are instances where a monitoring site does not have a valid daily maximum average for each required day during the ozone season. To account for missing values, an estimated number of exceedances is calculated using the formula provided in appendix H of 40 CFR Part 50, section 3. The estimated number of exceedances is equal to the number of observed exceedances plus an increment that accounts for the missing values. Once the estimated number of exceedances is calculated for each year the totals are added and the average number of exceedances per year can be calculated. Table 3 lists the SLAMS/NAMS monitoring sites in the Phoenix Planning Area and the average number of exceedances during the period 1994 - 1996.

As Table 3 shows, two sites have greater than one expected exceedance per year, Mesa and North Phoenix. Therefore, based on the data from the SLAMS/NAMS network, the Phoenix Area has not attained the ozone NAAQS by the statutory deadline of November 15, 1996.

Table 3
Average Number of Exceedances for the Ozone
SLAMS/NAMS Network 1994 - 1996

Monitoring Site	Observed Values Greater than Standard	Average Number of Exceedances per Year
South Phoenix	1	0.3
West Phoenix	0	0.0
Mesa	4	1.3
North Phoenix	4	1.3
Glendale	0	0.0
Pinnacle Peak	1	0.3
Central Phoenix	0	0.0
South Scottsdale	1	0.3

C. Determination of the Design Value

Guidance on calculating design values is provided in “Guideline for the Interpretation of Ozone Air Quality Standards” (January 1979, EPA-450/4-79-003). More recent guidance is provided in the *Memorandum* “Ozone and Carbon Monoxide Design Value Calculations”, June 18, 1990, from William

G. Laxton, Director, Technical Support Division, Office of Air Quality Planning and Standards, to the Regional Air Directors (Laxton memo)

The form of the 1-hour ozone standard allows a site to record three exceedances of the standard in a three-year period and still be in attainment of the standard. A fourth exceedance would cause the site to be in violation of the standard. Therefore, the fourth exceedance is the value that needs to be reduced to the level of the standard in order for a site to be in compliance with the standard. This is how the fourth highest value in three-years came to be chosen as the design value for a particular site, assuming no missing data.

The first step in developing the design value for a nonattainment area is to calculate the design value for each monitoring site that is not attaining the ozone standard. The highest of these site specific design values then becomes the design value for the area. As shown previously, there are two sites in the Phoenix Planning Area ozone SLAMS/NAMS network that are in violation of the standard. Additionally, there are a number of SPMs that are also in violation of the standard. Since these SPMs collect valid data, i.e. they meet all of EPA's monitoring requirements in 40 CFR Part 58, EPA believes they should also be considered in determining the design value for the area. For those sites that do not have three complete years of data an alternative to the fourth highest value is used for a design value. The Laxton memo provides a procedure to calculate which observed value should be used as the design value.

For the Phoenix Planning Area the monitoring sites violating the ozone standard and their associated design values are provided in Table 4 below.

Table 4
Sites Violating the Ozone Standard
And Their Design Values

Site Name	Monitor Type	1st High (ppm)	2nd High (ppm)	3rd High (Ppm)	4th High (Ppm)	Design Value
North Phoenix	SLAMS	0.142 8/31/95	0.132 7/29/94	0.129 8/29/95	0.125 9/1/95	0.125
Mesa	SLAMS	0.127 9/1/95	0.127 8/29/95	0.127 7/23/96	0.126 8/2/95	0.126
Fountain Hills	SPM	0.132 8/28/96	0.129 7/23/96	0.128 5/21/96	0.126 6/4/96	0.132
Falcon Field	SPM	0.139 7/23/96	0.134 8/2/95	0.130 7/8/95	0.130 8/4/94	0.130
Papago Park	SPM	0.144 8/31/95	0.139 9/1/95	0.133 8/29/95	0.132 8/7/95	0.132

Calculating the design values for North Phoenix, Mesa, Falcon Field, and Papago Park is straightforward since these sites all have three complete years of data. In these cases the design value is simply the fourth highest value observed during the three-year period.

The design value for Fountain Hills is based on the highest observed value. Fountain Hills is a relatively new site established in April of 1996. The 1990 Laxton memo provides the following procedure for determining the ozone design value at a site without a single complete year of data but at least 90 days of data during a three-year period. First, divide the number of valid daily maximums for the three-year period (1994-1996) by the required number of monitoring days per year. Second, add 1.0 to the first total and then use the integer portion of the result as the rank of the design value. The first day of sampling in Fountain Hills was April 22, 1996, giving 254 valid daily maximums. Divide 254 by 365 (the required number of sampling days per year in Arizona) to obtain 0.70. Add 1.0 to this result to obtain 1.70. The integer portion of this number is 1, therefore the first highest observed value is the design value for Fountain Hills.

D. Conclusions

Based on a review of the monitoring data from the area's SLAMS/NAMS network, the Phoenix area clearly did not attain the ozone standard by the statutory attainment date of November 15, 1996. The standard is attained at a particular monitoring site when the expected number of exceedances of the ozone standard per year is less than or equal to one based upon three years of data. Two monitoring sites, North Phoenix and Mesa, both averaged 1.3 exceedances per year. The nonattainment determination is further supported by multiple exceedances at SPM sites during the years 1994 through 1996.

The design value for area based on data from the SLAMS/NAMS network is 0.126 ppm, which is the fourth highest observed value at the Mesa monitoring site. If data from the Falcon Field, Papago Park, and Fountain Hills SPMs are considered, the design value for the area is 0.132 ppm. Both of these design values support the reclassification of the Phoenix area to serious. There are other SPMs in the Phoenix Planning Area that have enough data to utilize the procedure in the Laxton memo. However, because of the limited information available on the operating schedules of those monitors, any calculation of a design value would be open to debate. EPA believes that the design values calculated for these six five are representative enough to characterize the severity of the ozone nonattainment problem in the Phoenix area and that they support EPA's finding that the appropriate ozone reclassification for Phoenix is to serious and not severe.

II. Response to Comments Document.

EPA received twenty-one comment letters on the its proposed finding of failure to attain and denial of the Arizona's request for a 1-year extension of the attainment date (62 FR 46229 (September 2, 1992) ("proposal"). Comments were received from:

1. Russell F. Rhoades, Director, Arizona Department of Environmental Quality, October 1, 1997

2. The Honorable Jane Dee Hull, Governor of Arizona, September 29, 1997

3. Arizona Legislative Leadership, October 1, 1997

4. Frank Fairbanks, City Manager, City of Phoenix, October 2, 1997

5. Neil G. Giuliano, Mayor of Tempe, Arizona, September 29, 1997

6. Cynthia L. Dunham, Mayor of Gilbert, Arizona, October 1, 1997

7. Sam Katheryn Campana, Mayor of Scottsdale, Arizona, September 30, 1997

8. Al Brown, Director, Maricopa County Environmental Services Division, October 2, 1997

9. Timothy F. Mooney, Executive Vice President & Political Director, Arizona Association of Industries, (no date)

10. David P. Kimball, III, Chair, Environment Committee, Arizona Chamber of Commerce, October 1, 1997

11. Valerie Manning, President and CEO, Phoenix Chamber of Commerce, October 1, 1997

12. Don Stapley, Chairman, Maricopa County Board of Supervisors, October 2, 1997

13. Samantha A. Fearn, National Federation of Independent Business, Arizona, September 30, 1997

14. Edward Z. Fox, APS, October 2, 1997

15. David M. Martin, Executive Director, Associated General Contractors, Arizona Chapter, October 2, 1997

16. Jim Norton, Deputy Director, Arizona Rock Products Association, October 2, 1997

17. Tom Gunn, Executive Director, Arizona Small Business Association, September 30, 1997

18. Wayne J. Brown, Mayor of Mesa, Arizona, October 2, 1997

19. Steve Brittle, Don't Waste Arizona

20. U.S. Senator Jon Kyl and U.S. Representative John Shadegg, October 10, 1997

21. John Keegan, Mayor of Peoria, Arizona, October 1, 1997

EPA wishes to express its appreciation to each of these organizations for taking the time to comment on the proposal. Each raised important issues to which EPA welcomes the opportunity to respond.

EPA's proposal was composed of three elements: 1) a finding of failure to attain by the statutory deadline of November 15, 1996; 2) a denial of the State's request for a one-year extension of the

attainment date; and 3) a 12-month schedule for submittal of the revised State Implementation Plan (SIP).

For the most part, commenters made similar, and frequently identical, comments. The issues raised relate principally to 1) the adverse impacts of the reclassification to serious, 2) the inconsistency between EPA's policies implementing the revised ozone NAAQS and the reclassification, 3) the retention of the 1-hour ozone standard, 4) the denial of the request for a one-year attainment date extension, 5) EPA's compliance with the Regulatory Flexibility Act, and 6) proposed measures to mitigate the impact of the reclassification. Many of the comments received did not directly address EPA's proposals and instead focused on issues that have been the subject of earlier rulemakings (e.g., retention of 1-hour ozone standard), outside of EPA's regulatory authority in this action (e.g., the reclassification to serious), or unrelated to the action (e.g., approval of Arizona's excess emissions rule).

The comments, however, evince clear concern about the impacts of EPA's proposal on the Phoenix ozone nonattainment area; therefore, EPA has chosen to respond to many of the comments that are not directly relevant to its narrow proposals. For some of the proposed mitigation measures, EPA has not been able to develop a full response in the short time frame available for this rulemaking but will continue to work with affected parties to resolve the issues raised.

NOTE 1: The numbers in brackets correspond to the numbers above and indicate which commenters made a given comment.

NOTE 2: Most documents (other than Federal Registers) may be obtained from the docket for this rulemaking by contacting Frances Wicher, Office of Air Planning, EPA-Region 9 at (415) 744-1248 or Wicher.Frances@epamail.epa.gov.

Comment 1: All but two commenters [10 and 19] emphasized Arizona's leadership in the development and implementation of effective ozone controls (many of which are only mandated for serious or severe ozone nonattainment areas) and its demonstrated commitment to making real improvements in air quality. Among the controls cited are: the State's premier vehicle emissions inspection program (which includes the only regulatory use of remote sensing), Maricopa County's Travel Reduction Program, the extension of the Federal Reformulated Gasoline (RFG) program to the Phoenix area, and the State's adoption of its own, more stringent "Clean Burning Gasoline" program as well as numerous other control programs such as the voluntary lawnmower replacement program, mandatory conversion of government fleets to alternative fuels, and incentives for conversion of private fleets to alternative fuels and for the construction of public fueling facilities. The City of Phoenix [4] also listed a number of innovative air quality measures that it has implemented, and finally, APS [14] noted the voluntary efforts of business and community groups including the Business for Clean Air Challenge program.

Response: EPA is well aware of Arizona's leadership and has noted many times, including in its proposal for this action, the State's dedicated efforts to adopt and implement controls to attain the ozone standard. See proposal at 46232.

EPA would like to make clear that it is neither ignoring Arizona's exemplary efforts to adopt controls to improve its air quality nor minimizing Arizona's commitment to clean air. Both are evidenced by the numerous controls listed above and the State's continuing efforts to evaluate its ozone situation.

The Agency's duty under section 181(b) of the Clean Air Act ("CAA" or "Act") is to determine whether an area has attained the ozone standard by the statutory deadline within 6 months of that deadline and to publish the finding. For areas initially classified moderate such as Phoenix, this finding is based solely on air quality readings from the 1994-1996 time period. A finding of failure to attain is required if monitored air quality data demonstrate an average of more than one day per year over the ozone standard at any monitor during the three-year period immediately preceding the attainment date. 40 CFR § 50.9 and Part 50, Appendix H.

Under CAA section 181(a)(5), EPA is precluded from granting a one-year extension of the attainment date if an area fails to meet either of two statutory criteria for an extension. The second of these criteria is that no more than one exceedance of the ozone standard has occurred in the area in the attainment year. Determining compliance with this criterion involves a simple review of available 1996 ambient air quality data.

Neither the determination of attainment/nonattainment nor the determination of whether an area met the second extension criterion allows for reviewing an area's efforts to adopt controls. As is described above, this exercise involves little more than a rote review of available ambient air quality data. While it may desire more flexibility in this situation to reward Arizona for its demonstrated leadership, EPA has not been granted that flexibility under the Clean Air Act.

A. Comments Related to the Proposed Finding of Failure to Attain

Comment A.1.: ADEQ [1] and others [2, 12] noted that Arizona has implemented most of the mandatory control programs for both serious and severe ozone nonattainment areas and the only remaining requirements are for more stringent new source review (NSR) and the federal clean fleets program.

Response: Serious ozone nonattainment areas (like all other classifications) have both specific requirements for mandatory control programs and more general requirements for attainment and reasonable further progress. EPA agrees that the Maricopa area already has in place most of the mandatory control programs required for serious area. The State, however, has yet to address the requirements for attainment by 1999 in CAA section 181(c)(2)(A) or the 9 percent rate-of-progress requirement in section 181(c)(2)(B). Both these requirements are very likely to require measures beyond the specific control programs mandated by a serious area classification.

Comment A.2.: ADEQ [1] asserts that the schedules for planning and attainment under a reclassification almost certainly guarantee failure because it would be virtually impossible to actually implement the needed control programs before the 1999 ozone season. ADEQ demonstrates this point by noting that the attainment deadline of 1999 requires that cleaner air be achieved beginning in 1997 and that the new serious area plan is proposed to be due just eleven months before the attainment deadline. ADEQ states that achieving the submittal and attainment deadlines assumes that adequate technical information is available to determine which controls will provide real air quality benefits and such controls are available. Finally, ADEQ notes the difficulty it has had developing an ozone model and the large emission reductions that may be necessary to achieve the ozone standard by 1999. Governor Hull [2] and Maricopa County Supervisor Stapley [12] also made similar comments.

The Maricopa County Environmental Services Department (MCESD) [8] also commented that the 12-month schedule for submittal of the serious area plan was insufficient, noting that the State's Voluntary Early Ozone Plan (VEOP) raised additional questions and the necessity for additional analysis, research, and refinement including improving the emission inventory. MCESD also stated that it doubted whether any additional control measures identified during the planning process could be implemented within 12 months.

Response: EPA agrees that the short time available for planning and attainment between the moderate area deadline of November 15, 1996 and the serious area deadline of November 15, 1999 makes completing the required technical analysis and adopting additional controls difficult. The State, however, has already adopted or is in the process of adopting a number of controls that will contribute substantial emission reductions in 1997 or beyond. These controls include the federal reformulated gasoline program for 1997, Arizona's Clean Burning Gasoline program for 1998 and later, improvements to the vehicle emission inspection program, and an industrial solvent cleaning rule (currently schedule for adoption in early 1998). In addition, ADEQ continues to evaluate and refine the Urban Airshed modeling performed for the draft VEOP. All these actions give Arizona a head start in meeting the serious area requirements.

While the Act specifically bars it from adjusting the attainment deadline, EPA can exercise discretion in setting the SIP submittal deadline. See CAA section 182(i). In proposing a 12-month schedule for submittal of the revised plan, EPA understood that this was an ambitious schedule but stated that it believed "a 12 month schedule is appropriate because the attainment date for serious areas, November 15, 1999, is little more than 2 years away and the State will need to expedite adoption and implementation of controls to meet that deadline." See proposal at 42633.

Despite the concerns raised by the commenters, none suggested an alternative deadline for submittal. EPA will, therefore, retain the 12-month schedule for submittal of the SIP revisions needed to meet the serious area requirements.

Comment A.3.: Several commenters [1, 2, 8, 10-12, 15, and 16] note that the nature of the ozone problem in the Phoenix nonattainment area will require more long-term solutions and that the schedule demanded through this reclassification militates against such an approach and diverts valuable resources from developing and implementing policy options that will actually provide for achieving clean air.

Response: EPA acknowledges that the ozone problem in Phoenix may need more long-term solutions but believes that this should not preclude the adoption of reasonable and available measures with more short-term results. While the Act emphasizes attainment of the standards, it equally emphasizes *progress toward* attainment. See, for example, section 182(b)(1)(a) (requirement for a 15 percent reduction in emissions and then attainment) and section 182(c)(2)(A) and (B) (attainment and a 9 percent reduction in emissions).

Arizona has the recourse under the Act to seek an attainment date of November 15, 2005 by requesting voluntary reclassification to severe. EPA is required by CAA section 181(b)(3) to unconditionally grant such requests. The Agency understands that the even more stringent NSR provisions attached to a severe classification make this option unpalatable to the State. However, the undesirability of the available statutory alternative to demonstrating attainment by 1999 does not militate against a reclassification to serious. If anything, the inability to demonstrate attainment by 1999 argues for a severe classification and not for retention of the moderate classification.

Comment A.4.: Commenters [1, 2, 9, 10, 12-17, and 21] argue that the more stringent new source review (NSR) requirements will do little to improve air quality, because stationary sources of volatile organic compounds (VOC) represent less than 10 percent of total emissions and because the NSR program does not impose any new emissions control requirements for the existing major sources of air pollution, it is not expected to produce any reductions in ozone precursors in the near term. Commenters assert that imposition of more stringent NSR requirements is thus merely punitive and provides disincentives for investment in the Phoenix manufacturing sector.

Response: Even if commenters are correct that stationary sources of VOC emit less than 10 percent of the total VOC emissions in the area, this fact alone does not argue against the more stringent serious-area NSR requirements. States and local agencies routinely impose controls on sources that contribute less than 10 percent of the VOC inventory as part of their overall strategy to attain the ambient air quality standards. In fact, many stationary source control measures are targeted at sources that contribute less than 5 percent of the total VOC inventory and many target sources that contribute considerably less. Table 5 contains examples of control measures implemented in Maricopa County since 1990 that have targeted source categories that emit less than 5 percent of the total VOC inventory. Since all sources of VOC contribute to elevated ozone levels, it makes little sense in an area struggling to show attainment to ignore smaller categories of sources if reasonable controls are available to reduce their emissions.

Commenters argue that the Phoenix area will need long-term measures to attain the ozone standard. If this is the case, then the expectation that more stringent NSR provisions will produce emission reductions only in the long term supports their implementation. EPA also notes that one of the reasons the Phoenix area has not seen the full benefit of the myriad of controls it has put in place is that emission increases from the area's robust growth have offset some of these controls' benefits. In such a situation, programs that specifically target emission growth, like NSR, are beneficial since they lessen the need to develop compensating measures to offset this growth.

Phoenix is not being singled out for more stringent NSR requirements than any other similarly-classified area in the Country such as Atlanta, Washington, D.C., and San Diego. The more stringent NSR provisions (which principally affected which sources are subject to major source NSR) are required by statute of all serious areas without exception. This tightening of control requirements as areas move up the classification ladder is part of the basic Clean Air Act scheme for ozone attainment. In establishing this scheme, Congress determined that the more stringent NSR provision were reasonable for serious areas and, since Congress did not provide relief from these requirements for reclassified areas, it also determined that they were reasonable without exception for moderate areas being reclassified to serious. Thus, the implementation of more stringent NSR requirements is not punitive but simply part of the long-established scheme for ozone attainment.

Table 5 Categories that Emitted Less than 5% of the Total VOC Prior to Controls	
Source Category	Percent of the 1990 VOC Inventory
Wood coating	2.3%
Graphic Arts	1.5%
Commercial bakeries	0.4%
Vehicle refueling (stage II vapor recovery)	3.5%
Vehicle refinishing	1.0%

For documentation and calculations, see Appendix C to this TSD.

Comment A.5.: ADEQ [1] also argues that, while some benefits may be realized from the clean fuel fleets program, those benefits will not accrue during the time frame in which the area would be required to demonstrate attainment.

Response: EPA agrees that the benefits from the clean fuel fleets program are likely to accrue only after the 1999 serious area attainment date. The program, however, can still be beneficial to the area. As some commenters noted, Phoenix is likely to need long-term measures to attain the ozone standards; therefore, measures with emission reduction benefits that accrue only after the 1999 attainment deadline, like the clean fuel fleet program, can be important contributors to improving and maintaining Phoenix's air quality.

Comment A.6.: ADEQ [1] and Maricopa County Supervisor Stapley [12] claim that the reclassification is effectively punitive in nature because the imposition of these serious-area requirements will do little to improve air quality in the Phoenix metropolitan area and as a result is damaging to the partnership that the State needs to foster with EPA in order to solve our air pollution problems.

Response: The classification structure of the Act is a clear statement of Congress's belief that the later attainment deadlines afforded higher classifications required compensating increases in the stringency of controls. The reclassification provisions of the Clean Air Act are a reasonable mechanism to assure continued progress toward attainment of the health-based ambient air quality standards when areas miss their attainment deadlines.

The reclassification will assure a continuing process to identify and adopt available controls to improve air quality in Phoenix. Equally important, the new planning requirements will continue the effort to understand the causes and solutions to the Phoenix air quality problem.

B. Comments Related to Retention of the 1-Hour Ozone Standard

Comment B.1.: A number of comments [1, 2, 9, 10, 13, 15-17] were received on EPA's decision to retain the 1-hour ozone NAAQS. First, the commenters disagree with EPA's contention that retaining the 1-hour standard is necessary to achieve a smooth transition to the revised 8-hour ozone NAAQS, stating that, in fact, there is no transition because Arizona will be obligated to invest resources in

developing two plans and implementing potentially different sets of control strategies to solve the same public health problem. Second, the commenters assert that EPA cannot continue to enforce the 1-hour NAAQS now that it has replaced it with a new 8-hour NAAQS. The commenters give three reasons for this assertion: 1) under CAA section 109, EPA cannot adopt or retain a NAAQS that the agency has determined is not requisite to protect the public health or welfare; 2) under CAA sections 110 and 175(A), EPA cannot adopt a NAAQS that disappears when it is attained, and 3) under CAA section 110, EPA cannot adopt a NAAQS that is limited in applicability to specific geographic regions.

Response: The continued applicability of the 1-hour standard until EPA determines that the applicable area is meeting that standard is not the subject of this rulemaking. This rulemaking only concerns the finding that the Phoenix area failed to attain the 1-hour standard and the denial of the State's request for an extension of the attainment deadline for that standard. The issue of the continued applicability of the 1-hour standard was part of the rulemaking in which EPA promulgated an 8-hour ozone standard. 62 FR 38856 (July 18, 1997). That rulemaking proceeding, not this one concerning Phoenix, was the appropriate forum in which to raise issues concerning the continued applicability of the 1-hour standard.

C. Comments Related to the Proposal to Deny Arizona's Request for a One-Year Extension of the Attainment Date .

Almost all comments received opposed EPA's proposed denial of the State's request for a one-year extension of the November 15, 1996 attainment date. Before responding to the specific comments raised with regard to this issue, some introductory remarks are in order. In general, the commenters misperceived the nature of section 181(a)(5) of the CAA that provides:

Upon application of any State, the Administrator *may* extend for 1 additional year (hereinafter referred to as the "Extension Year") the [attainment deadline] if —

(A) the State has complied with all requirements and commitments pertaining to the area in the applicable implementation plan, and

(B) no more than 1 exceedance of the national ambient air quality standard level for ozone has occurred in the area in the year preceding the Extension Year.

No more than 2 one-year extensions may be issued under this paragraph for a single nonattainment area. Emphasis added.

Many commenters erroneously assumed that if the conditions in subparagraphs A and B above are met, then EPA must automatically grant the extension. However, by its terms, section 181(a)(5) is ultimately discretionary. See also Proposal at 46230. While EPA cannot grant an extension request if the conditions are not met, it is not required to do so even if they are. While EPA believes, as discussed at length below, that the second condition has not been met, the Agency has ample justification for denying the request even if that were not the case.

As will be seen, the central thrust of the comments EPA received on the extension issue is that EPA improperly included data from special purpose monitors (SPMs) from its calculation of whether the Phoenix area experienced no more than one exceedance of the ozone NAAQS in 1996, the year

preceding the extension year. For the reasons discussed below, EPA believes that it was entitled to rely on that data in making this assessment. However, even if the SPM data were excluded from the calculation, the Agency believes that it can properly exercise its discretion to deny the State's extension request.

As documented below and in Appendix D to this TSD, since at least 1989 Arizona has maintained an inadequate official monitoring network (known as the state or local air monitoring station/national air monitoring station or SLAMS/NAMS network) and has consistently declined to convert the SPMs (which meet all of EPA's technical criteria) to cure those deficiencies. It is not possible for EPA to accurately determine, based on an inadequate monitoring network, that an area has not had more than one exceedance of the ozone standard. Such a determination can only be made on a complete network. Moreover, when the data from the SPMs are combined with those of the official network, it is clear that the Phoenix area is not close to attaining the ozone 1-hour NAAQS. Modeling conducted by the State confirms this conclusion. Thus the underlying intent of the statute's extension provision has not been met. In acknowledging this reality, EPA can appropriately exercise its discretion to deny the extension request.

Comment C.1.: ADEQ [1] contends that in a letter dated June 6, 1997, to the Clerk of the United States Court of Appeals for the Third Circuit, EPA's legal counsel responded to a question from the Court asking why it was lawful for EPA to exclude consideration of data from monitors that are not part of the SLAMS network. ADEQ contends that the letter noted that EPA was not required to consider non-network (i.e., not part of the SLAMS/NAMS network) data showing violations of the NAAQS. Letter, June 6, 1997, from Lois J. Schiffer, Assistant Attorney General, Environmental Natural Resources Division (by Greer S. Goldman), U.S. Department of Justice (DOJ) to P. Douglas Sisk, Clerk, United States Court of Appeals for the Third Circuit ("3rd Circuit letter"). In support of its position that EPA may exclude SPM data, ADEQ also cites *Southwestern Pennsylvania Growth Alliance v. Browner*, 121 F.3d 106 (3rd Cir. 1997), for its proposition that EPA has excluded in the past exceedance data from its evaluation of a redesignation request because the data came from monitors that were not part of the SLAMS network.

Response: In the 3rd Circuit letter, EPA actually concluded that the Agency's regulation governing the use of SPM data at 40 CFR §58.14 does not authorize it to take into account the State's intended use of SPM data that otherwise meet that regulation's requirements when deciding whether to use it in an ozone redesignation action. As a result, under EPA's regulation, all available SPM data that meet the minimum federal siting and quality assurance requirements in 40 CFR Part 58 must be used in making regulatory decisions such as redesignations and reclassifications.

Southwestern Pennsylvania Growth Alliance involves EPA's disapproval of the Commonwealth of Pennsylvania's request to redesignate the Pittsburgh-Beaver Valley nonattainment area to attainment for ozone. In July 1995, EPA published a final notice of determination that the Pittsburgh-Beaver Valley Area was in attainment of the ozone NAAQS based on 1991-1993 data (60 FR 37015 (July 19, 1995)). Unfortunately, later in 1995 the area recorded 17 exceedances at SLAMS/NAMS monitoring sites including more than three exceedances at each of two monitors. 61 FR 28061 (June 4, 1996) As a result, the EPA revoked its earlier determination of attainment (61 FR 28061) and disapproved Pennsylvania's redesignation request for the area based in part on the 1995 violations demonstrating that the area was not attaining the ozone standard. (61 FR 19193 (May 1, 1996)). The Southwestern Pennsylvania Growth Alliance (SWPGA), an organization of major manufacturers and local

governments in the Pittsburgh-Beaver Valley region, sought review of EPA's disapproval by the Third Circuit Court of Appeals.

Among the issues raised by SWPGA was the use of 1995 SLAMS/NAMS data. SWPGA argued that EPA acted contrary to the Act by considering the 1995 ozone exceedances because they occurred after the EPA's 18 month deadline (in CAA section 107(d)(2)(D)) to act on the State's redesignation request which had been submitted in November, 1993. In an effort to clarify certain statements made in its brief, EPA identified certain instances where it had not used available data when acting on a redesignation request. In one instance, the San Francisco-Bay Area redesignation to attainment for ozone, EPA had excluded SPM data from its redesignation evaluation. 60 FR 27028 (May 22, 1995).

The court then directed EPA to address a number of questions, including why it is lawful for EPA to exclude consideration of data from monitors that are not part of the SLAMS network. The 3rd Circuit letter cited by ADEQ is EPA's response to the court on this issue. As stated in the letter (p. 4) :

For data from monitors that are not part of the SLAMS network required by [40 CFR] Part 58 [EPA's monitoring regulations], EPA regulations provide that EPA will exclude the data when they do not meet the terms of 40 CFR §58.14. That section provides, in relevant part:

Any ambient air quality monitoring station other than a SLAMS or [prevention of significant deterioration] station from which the State intends to use the data as part of a demonstration of attainment or nonattainment or in computing a design value for control purposes of the [NAAQS] must meet the requirements for SLAMS described in section 58.22 and, after January 1, 1983, must also meet the requirements for SLAMS as described in section 58.13 and appendices A and E to this part.

...In at least one case, EPA has interpreted section 58.14 to make a state's intent a factor in determining whether data from special purpose monitors that otherwise meet the requirements of section 58.14 may be excluded from consideration in an ozone redesignation action. However, EPA has recently evaluated that interpretation and concluded that it is not authorized by section 58.14.

This passage supports that conclusion that the only circumstance under which SPM data may be excluded is if the data do not meet the siting and quality assurance requirements of Part 58.

The statement that ADEQ cites from the 3rd Circuit letter comes from the letter's concluding paragraph which discusses the specific facts of *Southwestern Pennsylvania Growth Alliance*. All monitoring data under consideration in that case came from SLAMs monitors; there were no SPM data at issue in EPA's decision to deny the redesignation request. In this context, it is clear that the 3rd Circuit letter does not indicate that EPA may ignore SPM data:

If should be noted, however, that the issue of whether EPA has discretion to decide if data from outside the official monitoring network should be used in redesignation decisions is not at issue in this case, where all monitored violations of the ozone standard were recorded at official network monitors. And even if EPA were required to consider non-network data showing violations, EPA would not be authorized to ignore violations at official network monitors when determining whether an area has attained the standard and is entitled to redesignation. 3rd Circuit letter (p. 4).

ADEQ also cites the court's opinion to support its contention that EPA has excluded SPM data in the past. While the court noted that "[i]n at least one case, the EPA has excluded exceedance data from its

evaluation of a redesignation request because the data came from monitors that were not part of the [SLAMS] network...," it went on to state in the same paragraph:

Assuming arguendo that the EPA's exclusion of non-SLAMS exceedance data violates the EPA's duty not to redesignate an area that fails to attain the NAAQS, *the EPA's prior disregard of this duty did not relieve the EPA of its obligation to act correctly in other cases.* Emphasis added. 121 F.3d at 115.

Based on its interpretation of §58.14, and the facts of the Phoenix air quality situation discussed below, EPA believes that it is acting correctly in not excluding the SPM data from consideration in the Phoenix extension decision. See also EPA's response to the following comment.

Comment C.2.: ADEQ [1] and others [2, 9, 10, 13, and 15-17] question the timing of the EPA's issuance of the *Memorandum*, "Agency Policy on the Use of Special Purpose Monitoring Data" dated August 22, 1997, by John Seitz, EPA Director of the Office of Air Quality Planning and Standards ("SPM policy" or "SPM memo"), noting that it was issued just 3 days in advance of EPA's announcement that it was proposing to find that the Phoenix area had failed to attain the ozone standard and to deny the State's extension request. The commenters contend that, absent this "ad hoc policy," EPA would not have been able to propose to deny Arizona's one-year extension request based upon the use of the special purpose monitor data that EPA has heretofore rejected.

Commenters state that the information submitted to EPA's AIRS and additional data submitted to EPA by ADEQ demonstrate that, had the Fountain Hills special purpose monitor data properly been excluded, the criterion in section 181(a)(5)(B) would have been satisfied. Commenters note that during the year preceding the extension year (1996), there was only one exceedance of the ozone NAAQS at a SLAMS or NAMS monitor (the exceedance at the Mesa SLAMS monitor on July 23, 1996, when a reading of 0.127 ppm ozone was recorded) and that this was the only ozone exceedance recorded during the entire calendar year of 1996 on any official SLAMS or NAMS monitor.

Response: The proper treatment of SPM data has been growing national interest for some time, increasing the need for EPA to issue national guidance. As noted in the SPM memo (p. 1):

[OAQPS] has received several inquiries from Regional Offices into how special purpose monitoring data can be used in making a variety of regulatory decisions such as designations, classifications, and attainment date extensions. [It] also [has] a final ruling from the U.S. Court of Appeals for the Third Circuit which supports the U.S. EPA denial of Pennsylvania's redesignation request for the Pittsburgh-Beaver Valley ozone nonattainment area. In light of these questions, legal developments, and the new [NAAQS] implementation directives, [OAQPS] believe[s] it is necessary to discuss the use of all publicly available special purpose monitoring data for all regulatory applications.

Further impetus for the SPM policy was the revised ozone NAAQS under which EPA must quickly determine (within 90 days of publication of the revised NAAQS) which areas of the Country are attaining the 1-hour ozone standard. National guidance is clearly essential to assure consistency in the use of SPM data for these determinations.

The interest in and the need for a clear statement of the Agency's policy on SPM data was thus far broader than the Phoenix situation. The Agency did not, as the commenters imply, create an "ad hoc" policy simply to justify its proposed denial of Arizona's request for an extension but rather it articulated a national policy applicable to all areas of the Country.

Notwithdstanding, the commenters wrongly assert that EPA needed the August 22, 1997 SPM policy to justify its denial of Arizona's extension request. Even without a formal written policy statement, EPA believes that it has sound reasons to use the SPM data in this case, including the inadequate SLAMS/NAMS network in Phoenix discussed below, the discrepancies in measured air quality between the official monitors and the SPMs, and its long-established regulations governing the use of SPM data.

Moreover, both the June 6, 1997 letter to the Third Circuit and the Court's subsequent July 28, 1997 decision in *Southwestern Pennsylvania Growth Alliance*, both available long before EPA's announcement, may be read to imply that EPA must consider available SPM data in making regulatory decisions such as granting extension requests. As noted in the SPM memo (p. 2):

The Third Circuit Court decision supports the view that the EPA may not redesignate an area from nonattainment to attainment if the EPA knows that the area is not meeting the ozone NAAQS. Specifically, if the U.S. EPA knows of a violation or violations of the ozone NAAQS by either examining information within the AIRS or data from other sources and these data meet all 40 CFR Part 58 requirements, the U.S. EPA cannot determine that an area is attaining the NAAQS.

This logic applies equally to extension requests: if EPA knows of more than one exceedance in an area in the year preceding the extension year by either examining information within AIRS or data from other sources and these data meet all 40 CFR Part 58 requirements, the U.S. EPA cannot grant an extension of the attainment date. This is exactly the case here.

Finally, EPA notes that it informed Arizona of its intention to use the SPM data in advance of its August 25, 1997 announcement. In a presentation to the May 19, 1997 meeting of the Arizona air quality monitoring network stakeholders, EPA stated that the current Maricopa SLAM network was deficient and that it could not, without inclusion of the SPM sites, support the granting of an extension. At the June 9, 1997 meeting, EPA distributed the 3rd Circuit letter and noted that EPA would soon be formally clarifying its use of SPM data. EPA also made a series of courtesy calls to state and local agencies the week before its announcement to inform them that it would be proposing to find that Phoenix had failed to attain and that it was proposing to deny the extension request based in part on the SPM data.

Comment C.4.: Commenters [1, 2, 8-10, 13, and 15-17] contend that the use of the SPM data in this instance is inconsistent with actions taken in other nonattainment areas where special purpose monitor data were excluded for the purposes of making similar determinations and conclude that if EPA had followed its earlier precedents then data from the Fountain Hills special purpose monitor would not have been used to deny the extension request. Many of these commenters cite EPA's action on the Beaumont-Port Arthur, Texas nonattainment area. ADEQ [1] also notes that the SPM memo implicitly concedes that Agency policy up to the date of the memorandum had been to reject exactly the kind of monitoring data that EPA based its decisions to propose to deny the one-year extension. Commenters view EPA's refusal to follow prior precedent and disregard special purpose monitor data in this situation as a simple case of disparate treatment.

Response: EPA's previous record on the use of SPM data contains numerous examples of instances where the Agency has used SPM data in making designation and classification decisions. While commenters note one instance where EPA did not use available SPM data (the Beaumont-Port Arthur reclassification), and SPM memo notes one other (the San Francisco-Bay Area redesignation), there are

many more instances where the Agency has used SPM data to either designate or classify an area, including the original classification of the Phoenix area as moderate for ozone and PM-10 nonattainment designations for the Bullhead City and Payson, Arizona areas. Outside of Arizona, EPA has used SPM data to redesignate to nonattainment portions of White Top Mountain in New York and Smyth County, Virginia. See 56 FR 56694, 56704.

Many commenters cited EPA's 1996 action to correct the Beaumont/Port Arthur, Texas area ozone classification from serious to a moderate as an example of EPA's inconsistent use of SPM data. 61 FR 14496 (April 2, 1996). In this case, data from a SPM had originally been utilized to classify the Beaumont/Port Arthur area as a serious ozone nonattainment area. Based on additional information provided by Texas, EPA corrected the reclassification under CAA section 110(k)(6) from serious to moderate stating that the data from the SPM should not have been used for classification purposes because, among other reasons, the SPM was not a part of the state monitoring network, the data from the monitor were utilized for research purposes, and the data were not reported to EPA's Aerometric Information Retrieval System (AIRS).

Commenters contend that in these three circumstances the Phoenix's situation closely parallels Beaumont-Port Arthur's; therefore, EPA should treat the Phoenix SPM data in a like manner by excluding it. In response, EPA notes that it has clarified its policy on the treatment of SPM data since the April 2, 1996 action on Beaumont-Port Arthur, resulting in all three of these circumstances no longer being grounds for excluding SPM data.

Even if EPA's policy and regulations were that valid SPM data could be excluded in some cases (which they are not), EPA believes that there are two compelling reasons to use the SPM data in this case. These reasons are 1) the inadequacy of the Maricopa ozone monitoring network and 2) the large discrepancy between air quality when measured on Maricopa's SLAMS/NAMS network and when measured on the SLAMS/NAMS/SPM network.

Since 1989, EPA has consistently found that Maricopa's existing ozone SLAMS/NAMS network is inadequate to meet the monitoring objectives of Part 58, more specifically the requirement for a site measuring maximum concentration. A complete history of EPA's evaluations of the Maricopa County monitoring network can be found in Appendix D to this TSD. Numerous evaluations, including the recent VEOP, have indicated that maximum ozone concentrations are occurring in the rapidly-developing eastern-northeastern portion of Maricopa County. While there are SLAMS sites located throughout the central part of the Phoenix metropolitan area, there are no SLAMS sites in the eastern portion of the metro area. EPA has been urging the County for nearly a decade to locate an ozone SLAMS monitor in this area. The County has responded by locating numerous SPM sites there (including the Fountain Hills SPM site) but has yet to convert any of those sites into SLAMS or NAMS.

The inadequate SLAMS/NAMS network has led to a troubling discrepancy between the air quality measured on the SLAMS/NAMS network and that network when augmented by the SPM sites. These discrepancies are illustrated in Tables 6 and 7. As can be seen from Table 6, when data from the SPM monitors are added to the official network, the number of exceedances recorded in the Phoenix area between 1994 and 1996 increases by a factor of more than 4, the number of ozone violations increases by a factor of 6, and the number of days over the standard more than triples. It is clear from this comparison that the SPM monitors are essential to accurately characterize Phoenix's air quality.

Table 6 Air Quality Comparison between the SLAMS/NAMS Network and SLAMS/NAMS/SPM Network Maricopa County, 1994-1996		
	SLAMS/NAMS Network	SLAMS/NAMS/SPM Network (w/o Mt. Ord or Blue Point)
Number of Ozone Exceedance	10	44
Number of Ozone Violations	2	13
Number of Days over the Ozone Standard	6	21

As shown in Table 7, the discrepancy between the official and full networks is equally stark if just 1996 is considered.

Table 7 Air Quality Comparison between the SLAMS/NAMS Network and SLAMS/NAMS/SPM Network Maricopa County, 1996		
	SLAMS/NAMS Network	SLAMS/NAMS/SPM Network (w/o Mt. Ord or Blue Point)
Number of Ozone Exceedance	1	7
Number of Ozone Violations (based only on 1996)	0	1
Number of Days over the Ozone Standard	1	4

Clearly had EPA ignored the SPM data in Maricopa County, it would have greatly underestimated the severity of the area's air quality and inappropriately downplayed the impact of that air quality on public health.

Comment C.5.: ADEQ [1] asserts that if EPA had properly excluded the data from the special purpose monitor, Arizona would have been granted a one-year extension. On this basis, ADEQ concludes that EPA erred in proposing to deny the extension request and that the Agency's actions were arbitrary, capricious and inconsistent with actions taken in similarly-situated nonattainment area. ADEQ claims

that this inconsistency is prejudicial to the State, Maricopa County and the many agencies, citizens, businesses and others who diligently worked on the ozone issue over the past several years and argues that there is ample, valid legal authority for EPA to disregard data from special purpose monitors in ruling on Arizona's one-year extension request. ADEQ asserts that this is authority that EPA has acknowledged that it can exercise and has consistently exercised in recent years and that it should exercise in this case. Others [2, 9-10, 13, and 15-17] also asserted that EPA improperly used the SPM data.

Response: As discussed above, EPA's use of the SPM data is consistent with previous actions and is consistent with the Agency's current regulations and policies. In addition, EPA has documented ample grounds to justify the use of the SPM data in this case.

Despite ADEQ's and others' claims, EPA does not have the authority to ignore available quality-assured SPM data. As discussed previously, EPA regulations allow EPA to exclude SPM data only when they do not meet the terms of 40 CFR §58.14. Moreover, as stated in the proposal (at 46230), granting an extension is a discretionary act on the part of EPA. While it cannot grant an extension to an area that does not meet the two criteria, it is not required to grant an extension to an area that does meet the criteria. Therefore, commenters' contention that the Phoenix area would have been granted an extension if EPA had not considered the SPM data is incorrect.

EPA articulated two reasons in its proposal to deny the extension request. The first—more than one exceedance in the area—has been extensively discussed above. The second—that the Phoenix area was not close to attainment—went virtually unaddressed by most the commenters. As EPA stated in its notice:

[T]he underlying premise of an extension is that an area is close to attainment and already has in place the control strategy needed for attainment. All evidence in front of the Agency indicates that the Phoenix area is not close to attainment of the 1-hour ozone standard and that, despite the State's dedicated efforts to adopt and implement controls, the area will need to continue its on-going planning and control efforts. Thus, even if the Phoenix area met the statutory requirements for granting an extension, *EPA believes that such an extension would not be appropriate at this time.* Emphasis added. Proposal at 46232.

Several commenters [4, 8, 12, 14, 16 and 20] questioned EPA's conclusion that the Phoenix area was not close to attainment. These comments (which are addressed later), however, did not persuade EPA that its conclusion was wrong. An equal number of commenters tacitly agreed with EPA's position by noting the need for long-term measures to solve Phoenix's ozone problem and the impossibility of showing attainment by 1999 [1, 8, 11, 12, 15, and 16].

Given the significant probability that the Phoenix area would eventually face reclassification to serious even if it were granted an extension, EPA questions the actual benefit of such an extension to the area. The commenters have made extensive comments on the adverse impacts of reclassification, among them the short-term planning and attainment deadlines facing newly serious areas and the imposition of the more stringent NSR provisions. An extension would only compound the problem of the short time frames while simply deferring the more stringent NSR provision for at most two years. Hence, even if it were within its discretion to grant an extension, EPA stands by its belief that an extension is not appropriate at this time.

Comment C.6.: ADEQ [1] argues that the denial of the one-year extension is not a SIP-related function but rather a compliance issue for which special purpose monitor data should not be used to make a decision and as such, EPA's reliance on its SPM regulations in 40 CFR §58.14. is misplaced. ADEQ suggests that the proposed denial of a state's request for an extension is more a regulatory compliance or enforcement action, rather than a SIP-related function.

Response: As EPA noted in the proposal, the CAA's extension provision is intended to grant areas close to attainment a short additional period in which to attain the standard. Proposal at 46230. Areas that are not likely to attain within the two years maximum allowed under the CAA's extension provisions are not eligible for extensions. Thus, decisions to grant extensions are in effect preliminary determinations of whether an area will attain within the next two years, rather than regulatory compliance or enforcement actions as ADEQ suggests. The use of SPM data in these extension decisions are thus governed by the same regulation that governs the use of SPM data in determinations of attainment. These regulations state in applicable part:

Any ambient air quality monitoring station other than a SLAMS or [prevention of significant deterioration] station from which the State intends to use the data as part of a *demonstration of attainment or nonattainment* or in computing a design value for control purposes of the [NAAQS] must meet the requirements for SLAMS described in section 58.22 and, after January 1, 1983, must also meet the requirements for SLAMS as described in section 58.13 and appendices A and E to this part. Emphasis added. 40 CFR §58.14(a).

EPA, therefore, appropriately relied on 40 CFR §58.14(a) as a basis for its proposed denial of Arizona's extension request. This aside, however, EPA policy on the use of all SPM data is that all quality-assured and valid data meeting 40 CFR Part 58 requirements must be considered within any regulatory process. SPM memo, p. 1.

Comment C.7.: Two commenters [10 and 15] contend that EPA's rejection of the extension request is flawed because EPA's review of the technical accuracy of the SPM data was inadequate. The commenters list five reasons for this contention:

(1) There is no evidence that all of the deficiencies in the Maricopa County monitoring program noted in reports by EPA in 1989 and 1992 were resolved when the 1996 data were collected.

(2) EPA's cursory review of the 1996 data was not adequate to determine data validity. EPA considered only one exceedance day, focused on only one aspect of data validity, the QA plan, and conducted a site visit to only two stations.

(3) EPA documented that annual performance audits, which are required by 40 CFR Part 58, were not conducted.

(4) Monitoring station log books for 1996 indicate that, from time to time, monitoring station temperatures exceeded levels required for valid monitor operations as specified in the EPA monitor equivalency determination and as specified by the monitor manufacturer.

(5) EPA appears to place too much reliance on the fact that the county has a QA plan in place; however, the mere presence of a plan does not assure valid data.

Response:

(1) EPA acknowledges that there are still some deficiencies in the County's air pollution program that remain unresolved, including the fact that the ozone SLAMS network does not adequately represent air quality in the Phoenix area due to its lack of SLAMS monitors in the far eastern portion of the metropolitan area. These deficiencies, however, do not invalidate the ozone data collected by the County at its ozone SLAMS/NAMS sites or at its SPM sites. EPA has reviewed the siting for seven of the County's special purpose monitors. Site visits were conducted for five monitoring sites in 1997 (Maryvale, Fountain Hills, Blue Point, Falcon Field, and Emergency Management), the Hard Copy Information Reports (HCIR) and photographs were reviewed for the other sites West Chandler and Mount Ord. Based on the site visits and the information available, EPA found that all SPM sites met the siting criteria contained in 40 CFR Part 58, Appendix E. In July 1997, EPA reviewed the County's QA/QC documentation for its four SPM sites (Fountain Hills, Blue Point, Falcon Field, and Emergency Management) and one SLAMS site (Mesa) and found that they meet the requirements in 40 CFR Part 58, Appendix A. See *Memorandum,* Bob Pallarino, EPA, to John Kennedy, EPA; "Adequacy of Maricopa County Ozone Monitoring network," July 31, 1997 and *Memorandum*, John Kennedy and Bob Pallarino, EPA, to Debbie Jordan and Frances Wicher, EPA; "Site Evaluation and Quality Control/Quality Assurance Review of Selected Maricopa County Ozone Monitoring Sites," July 25, 1997. Therefore, EPA disagrees with the commenters assertion that its technical review was flawed because all of the program deficiencies cited in the 1989 and 1992 program evaluations have not been resolved.

(2) EPA does not normally conduct a systems audit for every ambient pollution analyzer a local or state agency operates before the Agency takes regulatory action based on monitoring data. In this case, EPA picked a random exceedance day and evaluated the QC/QA documentation for five monitoring sites, including site visits at two monitoring locations. Based on its review of the documentation and the site visits, EPA believes that these monitors were sited and operated in accordance with Agency requirements contained in 40 CFR Part 58 and therefore, determined that the data are valid. Along with other quality assurance checks, instrument audit results validate the adequacy of the instrument calibration process and provide an independent check of instrument performance. Since the audit results reviewed were well within EPA limits, there is no basis to call the ozone data for the year into question.

(3) EPA's comments in the July 25, 1997 memo "Site Evaluation and Quality Control/Quality Assurance Review of Selected Maricopa County Ozone Monitoring Sites" regarding the annual performance audits have been misunderstood by the commenter. The memo states: "Some stations are going longer than one year between performance audits." This statement does not mean that no performance audits at all were being conducted but rather that the period between audits was in some cases longer than 12 months. While not meeting the minimum requirement contained in EPA regulations, this failure to conduct performance audits within 12 months of each other does not mean that the data collected at a site is invalid.

(4) As mentioned previously, EPA conducted site visits for five of the County's SPM sites in 1997. In all cases the ozone analyzers were located inside trailers or buildings that were air conditioned. According to Maricopa County staff all ozone monitoring stations are air conditioned. In reviewing station and instrument logs, EPA found no evidence that station temperatures exceeded recommended levels. The commenters vague assertion that station temperatures were too high are not sufficient basis for EPA to invalidate the ozone data collected by the County.

(5) EPA agrees that simply having a QA plan does not assure valid data. EPA, however, did not assume that the monitoring data were valid because the County had a QA plan. As stated previously, EPA conducted a review of the County's QC/QA documentation and found that it was in fact performing the required QC/QA operations, including bi-weekly precision checks, regular calibrations of equipment, and required performance audits of analyzers by an independent auditor.

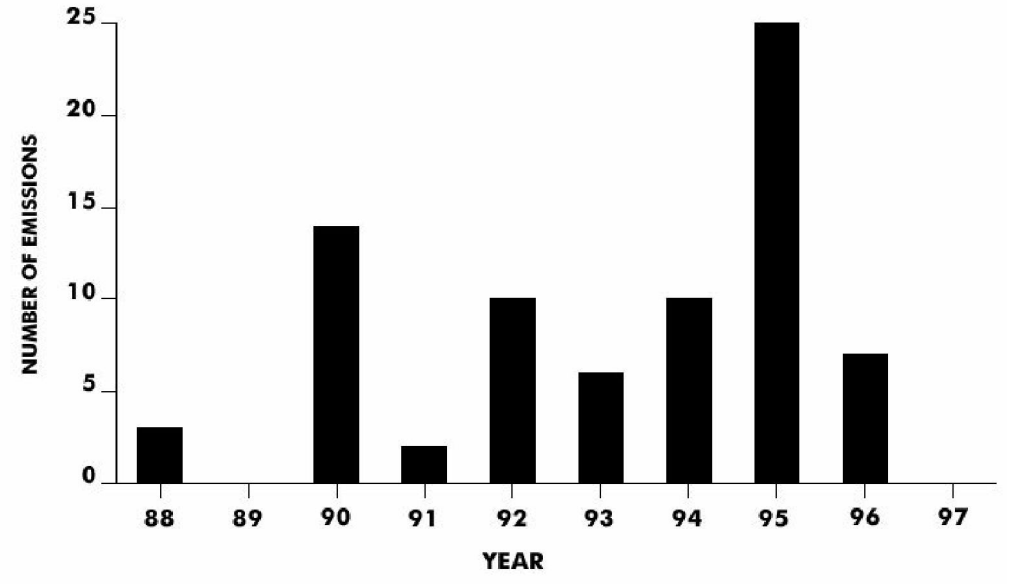
Comment C.8.: A number of commenters [8, 12, 14, 16, and 20] noted that the Phoenix area had not experienced any ozone exceedance in 1997 and contended that this indicates that the area's ozone problem has been solved. Noting that the number of ozone exceedances peaked in 1995 and decreased in 1996, the County stated that the "reality check" provided by the ambient data indicates a trend contradictory to EPA's contention that the Phoenix area is not close to attainment.

Response: The clean ozone air quality that the Phoenix area has experienced this year is very good news. These lower ozone readings are no doubt due in some part to the introduction of reformulated gasoline and the continuing implementation of other control programs such as the State's premier vehicle emission inspection program.

Unfortunately, a single year of ozone data cannot be used to conclude that an area is close to attaining the 1-hours ozone standard. The Phoenix area has experienced another year (1989) in which ozone exceedances were not recorded, only to have the subsequent years show widespread violations. See Figure 1. Ozone levels are related to both emission levels and meteorology. Hot, stagnant conditions tend to increase ozone levels while cooler, windy conditions reduce them. As a result of this meteorological component, ozone levels can vary greatly from year to year. The 1-hour ozone standard accounts for the weather's effect by evaluating compliance over a three-year period (that is, an area can average no more than 1 exceedance per year over a three-year period).

There is some reason to believe that favorable weather patterns this year have also contributed to Phoenix's low ozone readings. In fact, 1997 has been an unusually good year for air quality throughout the West. All areas in EPA Region 9 (with the exception of San Diego and the Imperial Valley) have shown decreases in second-high ozone levels from 1996 to 1997. See Table 4. Unlike Phoenix, none of

Figure 1



these areas have introduced substantial new emission reduction programs that would account for these decreases.

Number of Annual Exceedances

Phoenix Metropolitan Ozone Nonattainment Area

Full SPM data is not available for 1993; therefore, the number of exceedances for that year may be low.

Table 4
Average 1996 to 1997 Change in Second Peak Ozone Readings

Area	**Percent Change**
San Francisco-Bay Area, CA	-27.2
Santa Barbara, CA	-20.9
Ventura County, CA	-19.0
Sacramento, CA	-17.0
South Coast, CA	-14.0
North State, Nevada	-11.6
Southeast Desert, CA	-10.2
PHOENIX, ARIZONA	**-7.2**
South State, Nevada	-6.9
Tucson, Arizona	-4.5
San Diego, CA	2.3
Imperial Valley, CA	7.7

Source: STAPPA/ALAPCO Website. Data from Ozone Fast Track reports. 1997 data is through 8/31/97.

While the trend from 1995 to 1997 is also good news, it alone cannot be taken as a definitive sign that the Phoenix area is attaining or even close to attaining the 1-hour ozone standard.

D. Comments Related to Regulatory Flexibility Act Requirements.

Comment: A number of commenters [1, 9, 10, 13, 15, and 17] ***claim that EPA failed to comply with the Small Business Regulatory Enforcement Fairness Act of 1996 (SBREFA) in its proposal. They***

claim that EPA incorrectly certified that its action would not have a significant economic impact on a substantial number of small entities.

In support of their argument, the commenters state that small businesses that emit 50 tpy or more of VOCs will become subject to reasonably available control technology (RACT) requirements, more stringent NSR requirements, and the title V operating permit program as a result of the reclassification to serious. They describe in some detail the potential adverse impacts of those requirements on small businesses.

The same commenters also assert that EPA's reliance on Mid-Tex Electric Cooperative, Inc. V. FERC, 773 F.2d 327 (D.C. Cir. 1985) for not preparing a regulatory flexibility analysis is misplaced. They also note that Mid-Tex was decided a decade before Congress enacted SBREFA and, more significantly, that SBREFA imposes outreach requirements on EPA and OSHA that are imposed on no other government agencies (citing 5 U.S.C. section 609(b) and (d)).

Response: The Regulatory Flexibility Act (RFA), 5 U.S.C. sections 601 et seq., provides that, whenever an agency is required to publish a general notice of rulemaking for a proposed rule, the agency must prepare an initial regulatory flexibility analysis for the proposed rule unless the head of the agency certifies that the rule "will not, if promulgated, have a significant economic impact on a substantial number of small entitites" (section 605(b)). The purpose of the RFA is to ensure that when an agency develops a rule, it considers how the rule will apply to small entities and how the rule could be tailored "to fit regulatory and informational requirements to the scale" of the small entities "subject to regulation" (P.L. 96-354, section 2(b)). The EPA certified the proposed determination that the Phoenix area did not attain the 1-hour ozone standard by the attainment date and the proposed denial of the attainment-date extension request, based on its conclusion that the rule would not establish requirements applicable to small entities and therefore would not have a significant economic impact on small entities within the meaning of the RFA.

At the heart of EPA's certification of the proposed rule was the Agency's interpretation of the word "impact" as used in the RFA. Is the "impact" to be analyzed under the RFA a rule's impact on the small entities that will be subject to the rule's requirements, or the rule's impact on small entities in general, whether or not they will be subject to the rule? In the case of the determinations that trigger a reclassification, the question arises because such determinations do not themselves establish regulatory requirements applicable to small (or large) entities, but they may trigger the application to small entities of regulatory requirements established by other rulemakings under the Clean Air Act (or, conceivably, other statutes).

As described elsewhere in this rulemaking, CAA section 181(b) requires EPA to determine whether an area has attained a national ambient air quality standard (NAAQS) by the applicable attainment deadline. The section provides that the determination is to be based on the area's design value (as derived from air quality monitoring data). If EPA finds that the area has not attained, the section generally provides that the area "shall be reclassified by operation of law" (section 181(b)(2)(A)). The section requires EPA to publish a notice in the Federal Register identifying each area the Agency has determined to be in nonattainment and "identifying" the resulting reclassification of the area (section 181(b)(2)(B)).

Consistent with section 181(b), today's notice only answers the question of whether the Phoenix area has attained, identifies the resulting reclassification that occurs by operation of law and denies the

Arizona's request for an extension of the resulting attainment deadline. It does not establish, revise or otherwise address any control requirements applicable to small (or large) entities. In its scope, it is typical of attainment determination rulemakings. Given section 181's short timeframe for attainment determinations and reclassifications (six months), such rulemakings are generally limited to the factually-based inquiry of an area's design value and to the statutorily-mandated identification of the area's resulting classification. Under the terms of the consent decree governing today's rulemaking, EPA had less than six months to promulgate a determination and identify the resulting classification for the Phoenix area.

At the same time, regulatory consequences may or will flow from today's determination and reclassification. Commenters identified several regulatory requirements they believe will immediately and invariably be imposed on small entities as a result of today's action. EPA does not agree that all of the requirements they idenitify will be applicable as a result of today's action alone. However, the Agency acknowledges that reclassification to serious will require the State of Arizona to adopt, submit to EPA and achieve approval of revisions to its State Implementation Plan regulationg pollution sources in various ways. Further, under Title I of the CAA, Arizona's plan for Phoenix will have to contain certain mandatory requirements some of the terms of which are set by the Act or EPA regulation. Arizona may also supplement those mandatory requirements with requirements of its own choosing as needed to reach attainment. Finally, reclassification will affect the applicability of the permit program required by Title V of the Act to sources in the reclassified area.

The RFA issue posed by today's rule is whether "impact" under the RFA includes regulatory requirements that the rule does not establish, but may trigger under the terms of other rules or statutory provisions. EPA believes the answer is no. The RFA's text, legislative history and caselaw all make clear that RFA analysis is limited to the requirements of the rule being promulgated, since only the requirements being established by the rule are susceptible to RFA analysis and tailoring to ensure the requirements "fit" the scale of the small entities subject to the rule.

EPA's interpretation of "impact" flows from the express purpose of the RFA itself. As the RFA's "Findings and Purposes" section (Pub. L. 96-354, section 2) makes clear, Congress enacted the RFA in 1980 out of concern that agencies were writing one-size-fits-all regulations that in fact did not fit the size and resources of small entities. Congress noted that it is generally easier for big businesses to comply with regulations, and that small business are therefore at a competitive disadvantage in complying with uniform rules. Congress also noted that small entities' relative contribution to the problem a rule is supposed to solve may not warrant applying the same requirements to large and small entities alike. In the RFA itself, Congress therefore stated:

It is the purpose of this Act to establish as a principle of regulatory issuance that agencies shall endeavor, consistent with the objectives of the rule and of applicable statutes, to fit regulatory and informational requirements to the scale of the businesses, organizations, and governmental jurisdictions subject to regulation.

[Pub. L. 96-354, section 2(b).]

The RFA sections governing initial and final regulatory flexibility analyses reflect this statement of purpose. RFA sections 603 and 604 require that initial and final regulatory flexibility analyses identify the types and estimate the numbers of small entities "to which the proposed rule will apply" (sections 603(b)(3) and 604(a)(3)). Similarly, they require a description of the "projected reporting,

recordkeeping and other compliance requirements of the proposed rule, including an estimate of the classes of small entities which will be subject to the requirement" (sections 603(b)(4) and 604(a)(4)). At the core of the analyses is the requirement that agencies identify and consider "significant regulatory alternatives to the proposed rule" that would "accomplish the stated objectives of applicable statutes and which minimize any significant economic impact of the proposed rule on small entities" (section 603(c) and 604(a)(5)). Among the types of alternatives agencies are to consider are the establishment of different "compliance or reporting requirements or timetables" for small entities and the exemption of small entities "from coverage of the rule, or any part" of the rule (section 603(c)(1) and (4)). The RFA thus makes clear that regulatory flexibility analyses are to focus on how to minimize the requirements a rule will establish as they will apply to small entities.

Since regulatory flexibility analyses are not required for a rule that will not have a "significant economic impact on a substantial number of small entities," it makes sense to interpret "impact" in light of the requirements for such analyses. Regulatory flexibility analyses, as described above, are to consider how a rule will apply to small entities and how its requirements may be minimized with respect to small entities. In this context, "impact" is appropriately interpreted to mean the impact of the requirements established by the rule on the small entities that will be subject to those requirements. As described in detail further below, the case law supports this conclusion.

A determination that the Phoenix area did not attain the 1-hour standard by the applicable attainment date (including any decision regarding whether to grant a request to extend the attainment date) does not by itself establish any requirements applicable to small entities. A determination is thus not susceptible to regulatory flexibility analysis of the type prescribed by the amended RFA and consistent with its purposes. Since it establishes no requirements applicable to small entities, it affords no opportunity for EPA to fashion for small entities less burdensome compliance or reporting requirements or timetables, or exemptions from all or part of the rule. For these reasons, EPA certified that the proposed determination would "not have a significant impact on a substantial number of small entities within the meaning of those terms for RFA purposes." 62 FR 46233 Because EPA was not required to prepare an initial regultory flexibility analysis for the rule, it was also not required to convene a Small Business Advocacy Review Panel for the rule under RFA section 609(b) as added by SBREFA.

The fact that the Clean Air Act prescribes that the final determination of the Phoenix area's nonattainment will, by operation of law, result in the area's reclassification, and that various consequences (e.g., tighter Title V applicability provisions) may or will flow from that reclassification, does not mean that EPA either can or must conduct a regulatory flexibility analysis of the rule promulgating that determination. While some of those consequences may be predictable, many are not. For example, Arizona may revise or supplement existing requirements in ways that may or may not affect small entities. EPA simply cannot know at this time what the full effects of reclassification will be on small entities in the reclassified area.

Even assuming that EPA can now determine exactly what these consequences will be, the purpose of the RFA is not served by attempting a regulatory flexibility analysis of today's determination. As explained above, the purpose of the RFA is to promote Federal agency efforts to tailor a Federal rule's requirements to the scale of the small entities that will be subject to it. That purpose cannot be served in the case of a nonattainment determination since the rule does not establish requirements applicable to small entities. In promulgating a determination of whether an area has attained the standard by the applicable attainment date, the only question before EPA concerns whether the area attained by the

applicable attainment date, not the implementation consequences that may or will ultimately follow from a determination of nonattainment. Even if all of such consequences were predictable (and they are not), there is nothing EPA can do, in making the determination of whether the Phoenix area attained the standard by the applicable attainment date, to tailor those ultimate consequences as they apply to small entities. Whether and how the resulting SIP programs will apply in particular in the Phoenix area is beyond the scope of the rulemaking on the determination of whether the area achieved timely attainment and, indeed, beyond EPA's reach in any rulemaking to the extent the CAA prescribes the applicability and terms of the programs or leaves them to States' discretion (*see*, e.g., CAA section 182(b)(3) and (c) and section 116).

To require EPA to include in its RFA calculus the implementation consequences of nonattainment determinations would be to effectively require EPA to expand the scope of nonattainment determination rulemakings to include those consequences, since only then would the rules contain requirements that are susceptible to RFA analysis and tailoring. But in view of the State's primary role in implementation, many implementation consequences are not even of EPA's making; they exist as a matter of State law. While EPA is authorized to approve or disapprove a State's plan depending on whether it is sufficient to achieve attainment and otherwise satisifies CAA requirements, EPA cannot disapprove a State plan because of its consequences for small entities (*see* CAA section 116) or somehow extinquish the State law or regulation establishing the requirement.

Furthermore, nothing in the text or history of the RFA suggests that an agency must expand the scope of a rulemaking to include requirements that may be triggered by the rule so that the agency may take account of, and potentially tailor, those requirements as they may eventually apply to small entities as a result of the rule being promulgated. As noted above, the RFA requires an agency to analyze only the "requirements of the proposed rule" (section 603(b)(3)), not also the requirements of other rules that may be triggered by the rule. Moreover, it calls for the agency to identify and consider alternatives "to the proposed rule," not also to any requirements the proposed rule may trigger.

The RFA's legislative history demonstrates that Congress, in drafting the RFA, sought to avoid frustrating agencies' ability to fulfill their statutory objectives. *See*, e.g., Cong. Rec. 21455, August 6, 1980. To read the RFA as requiring an agency, when developing a rule, to reopen any and all existing requirements that might be affected by the rule would be to burden agencies in a way Congress never intended and potentially at variance with other congressional requirements. For instance, in the case of rules subject to tight statutory deadlines (such as attainment determinations), it may not be feasible for an agency to complete the rulemaking on time and include in that rulemaking issues and requirements outside the scope of the statutory provision establishing the deadline.

Moreover, it is not necessary for RFA analyses to reach requirements that may be triggered by the rule being promulgated for the purpose of the RFA to be served with respect to the triggered requirements. Assuming those requirements are Federal requirements established after 1980 (when the RFA was enacted), the rulemakings establishing them were subject to the RFA, and the agencies establishing them would have considered the extent to which the requirements could and should have been tailored to the size of the small entities subject to them. The fact that these requirements could and would be triggered by actions taken in other rulemakings may also have been apparent at the time (see, e.g., NSR and Title V provisions that apply to "major sources"), and any small entity impact issues that might result from such a linkage could have been addressed then. To the extent any small entity impacts were not foreseen, they are properly addressed in a rulemaking addressing the requirements applicable to the small entities.

This approach to interpreting and implementing the RFA is particularly sensible for the regulatory regime established by Congress for setting and achieving safe levels of air quality. Under CAA section 109, Congress has required EPA to determine safe levels of air quality (the NAAQS). Under CAA section 181, Congress has required EPA to detemine whether an area has attained a NAAQS by the applicable attainment date based on air quality monitoring data. In other words, an area's attainment status is to be based on whether the area has actually attained the standard, as measured by monitoring data. At the same time, under CAA section 110, Congress has called on States with areas found in nonattainment to establish plans containing control requirements sufficient to bring the area into attainment. Depending on the severity of an area's nonattainment problem, among those requirements may be certain controls specified by the CAA.

Congress has thus established a CAA regime whereby there is a benchmark of health-protective air quality and a determination of its attainment based on air quality monitoring. The RFA does not change that regime. Section 606 of the RFA provides that "requirements of [the sections requiring initial and final regulatory flexibility analyses] do not alter in any manner standards otherwise applicable by law of agency action." *See also*, RFA sections 603(c) and 604(a)(6) and Cong. Rec. 21455, August 6, 1980. Accordingly, under the CAA and the RFA, whether an area is in attainment does not change with the potential impacts of nonattainment on small (or large) entities. However, the requirements that may be triggered by an area's nonattainment designation *are* susceptible to RFA analysis and potentially to tailoring to reflect the size and resources of small entities. And, in fact, EPA has done regulatory flexibility analyses for its rules establishing nonattainment-related requirements (e.g., NSR and reformulated gasoline requirements).

The commenters' attempt to minimize the relevance of *Mid-Tex* is flawed. In that case, petitioners claimed that the RFA required an agency to analyze the effects of a rule on small entities that were not regulated by the rule but might be indirectly affected by it. Petitioners noted that the Small Business Administration (SBA) also interpreted the RFA to require analysis of a rule's impact on small entities not regulated by the rule, and argued that the court should defer to the SBA's position in light of its compliance monitoring role under the RFA. After reviewing the RFA's "Findings and Purposes" section, its legislative history, and its requirements for regulatory flexibility anlyses, the Mid-Tex court rejected petitioners' interpretation. As the Court explained:

The problem Congress stated it discerned was the high cost to small entities of compliance with uniform regulations, and the remedy Congress fashioned — careful consideration of those costs in regulatory flexibility analyses — is accordingly limited to small entities subject to the proposed regulation. ... [W]e conclude that an agency may properly certify that no regulatory flexibility analysis is necessary when it determines that the rule will not have a significant economic impact on a substantial number of small entities that are subject to the requirements of the rule.

773 F.2d at 342. A recent case affirmed this interpretation. In *United Distribution Companies v. FERC*, 88 F.3d 1105, 1170 (D.C. Cir. 1996), the Court noted that the *Mid-Tex* court:

... conducted an extensive analysis of the RFA provisions governing when a regulatory flexibility analysis is required and concluded that no analysis is necessary when an agency determines "that the rule will not have a significant economic impact on a substantial number of small entities *that are subject to the requirements of the rule*".

Id., citing and quoting *Mid-Tex* (emphasis added by *United Distribution* court).

In defense of their argument that EPA's reliance on *Mid-Tex* is misplaced, the commenters argue that EPA's action here effectively imposes direct requirements on small businesses. They assert that, even though the Clean Air Act requirements that will result from the reclassification will be imposed by the State, it is EPA that actually dictates what those controls will be. The commenters claim that the relationship between FERC and the State with respect to the federal rate standard at issue in *Mid-Tex* is wholly different from the "symbiotic manner" in which regulations are developed and implemented by the State and EPA.

This argument mischaracterizes the holding in *Mid-Tex*. That holding did not turn on the presence or absence of any particular type of federal-State relationship. Instead, the relevant inquiry was whether small entities were actually subject to the requirements of the rule under review. In reaching its decision, the Court noted that requiring agencies to "consider every indirect effect that any regulation might have on small businesses ... is a very broad and ambitious agenda, ... that Congress is unlikely to have embarked on ... without airing the matter." *Mid-Tex*, 773 F.2d at 343. *See also*, *Colorado State Banking Bd. v. Resolution Trust Corp.*, 926 F.2d 931 (10th Cir. 1991). As stated above and in its proposed rule for this action, EPA's finding of failure to attain does not in itself directly impose any requirements on small entities.

Finally, the fact that *Mid-Tex* was decided a decade before the enactment of the SBREFA, and that the SBREFA applies several new requirements on EPA and OSHA in particular, does not mean that Congress intended through the SBREFA to overrule *Mid-Tex*. To the contrary, nothing that Congress did or said in enacting the SBREFA indicates that Congress intended such a result. Rather, while the SBREFA amends portions of the RFA, it does not amend any of the provisions relied upon by the *Mid-Tex* Court in interpreting the scope of the RFA. Even more telling is that the SBREFA does not expand the regulatory impact analysis requirements of the RFA to include consideration of impacts to entities not directly subject to an agency's proposed or final rules. Congress's silence on this point suggests that it intended to let the *Mid-Tex* interpretation stand when it amended the RFA in enacting the SBREFA.

In addition, *United Distribution*, which was decided after Congress enacted the SBREFA, embraced this holding of *Mid-Tex.* Nothing in *United Distribution* suggests that the enactment of the SBREFA was cause to reassess this aspect of *Mid-Tex*; rather, the Court in *United Distribution* embraced the *Mid-Tex* Court's view of the RFA.

Moreover, the fact that Congress imposed additional outreach on EPA (and OSHA), in particular, is irrelevant. The additional requirements that the commenters cite — 5 U.S.C. section 609(b) and (d) — are not even triggered when EPA certifies that the rule at hand does not have a significant impact on a substantial number of small entities. Thus, the enactment of those outreach provisions cannot fairly be interpreted as an expression of Congressional intent that these two agencies never certify that a rule lacks such an impact.

E. Comments Related to Mitigating The Adverse Impacts of Reclassification.

Many commenters [1, 2, 5, 8-10, 13, 15-17] suggested several steps that could be taken to mitigate the adverse impacts of the reclassification to serious. While it will briefly respond to most of the suggestions here, many involve issues that are being dealt with in forums other than this action. EPA will continue to work through these other forum with interested parties in Arizona to address these issues.

Comment E.1.: Commenters requested that EPA suspend further enforcement of the 1-hour ozone NAAQS in the Phoenix Metropolitan area by amending its "Implementation Policy" for the revised eight-hour ozone NAAQS to exempt from the requirement to comply with the 1-hour ozone NAAQS those nonattainment areas that meet certain criteria. Commenters suggest that these criteria include (1) the nonattainment area has implemented all reasonable short-term measures that are available to reduce atmospheric ozone concentrations, including the primary mobile source VOC reduction requirements applicable to serious ozone nonattainment areas described in section 182(c) of the Act; (2) major sources represent less than 10% of the anthropogenic VOC emissions for the nonattainment area; and (3) continued efforts to comply with the 1-hour ozone NAAQS will have a detrimental effect on the nonattainment area's ability to comply with the new eight-hour ozone NAAQS.

Commenters assert that this flexibility is supported by the "Implementation Policy" by citing that the Policy's statements that implementation of the new 8-hour ozone NAAQS should be "carried out to maximize common sense, flexibility, and cost effectiveness" and should "respect the agreements already made by States, communities, and businesses to clean up the air . . . by avoiding additional burdens with respect to beneficial measures already underway." (62 FR 38421, 38421 (July 18, 1997) Commenters state that reclassifying the Phoenix ozone nonattainment area would not exhibit "common sense, flexibility, or cost effectiveness.

Response: The document referred to and cited by the commenters as the "Implementation Policy," 62 FR 38421 (July 18, 1997) is a memorandum to the EPA Administrator entitled "Implementation of Revised Air Quality Standards for Ozone and Particulate Matter" ("President's Memorandum") signed by President Clinton for the implementation of the revised ozone and particulate matter standards. Attached to that memorandum is a strategy, "Implementation Plan for Revised Air Quality Standards" ("Implementation Plan") outlining the steps for implementing these standards. EPA is currently developing guidance and proposed rules consistent with the President's Memorandum. EPA is committed to the goals of maximizing common sense, flexibility, and cost effectiveness in implementing the revised NAAQS.

EPA's action reclassifying Phoenix as a serious ozone nonattainment area is in no way inconsistent with those goals. Furthermore, it is consistent with the continued applicability of the 1-hour standard and subpart 2 as provided for in EPA's rulemaking on the ozone NAAQS. See 62 FR 38856, 38873. To the extent that the comments concern that issue, they are not appropriately raised in this rulemaking.

Neither the provisions of 40 CFR § 50.9, as revised (62 FR 38856, 38894), nor any other statutory or regulatory provisions, provide EPA with the authority to suspend enforcement of the 1-hour NAAQS in Phoenix. Moreover, as noted earlier, the Phoenix area has not complied with some of the most significant serious area requirements (e.g., the 9% ROP plan). Finally EPA believes that complying with those requirements will have a positive, not detrimental, effect on the ability of Phoenix to comply with the 8-hour standard.

Comment E.2.: ADEQ agrees with the statements in the EPA's proposed interim implementation policy that nonattainment areas should be allowed to redirect their efforts to the new NAAQS rather than continuing to adopt new control measures to achieve the old NAAQS and while such areas should continue with the implementation of the control measure programs already required, they need not have to comply with the additional specified control measures that they would have been subject to had they been reclassified in accordance with the provisions of subpart 2 [of part D of the Clean Air Act]. 61 FR 65754 (December 13, 1996). ADEQ states that it does not understand why EPA changed its position in

the final implementation policy, noting that the only explanation was the "cryptic statement" that EPA "has concluded, based on its legal review, that Subpart 2 *should* continue to apply as a matter of law...." 62 FR 38424 (Emphasis added); *see also* 62 FR 38856, 38873 (July 18, 1997). ADEQ concludes that it believes that EPA's initial interpretation was correct.

Response: EPA proposed an "Implementation Policy on New or Revised Ozone and Particulate Matter National Ambient Air Quality Standards (NAAQS) ("Proposed IIP") in conjunction with its proposed NAAQS rulemaking. 61 FR 65752 (Dec. 13, 1996). The comment period for that proposal closed on March 12, 1997. EPA has not issued a policy based on the Proposed IIP but, as stated above, is developing final guidance consistent with the President's Memorandum and associated Implementation Plan. EPA determined in the ozone NAAQS rulemaking that the 1-hour standard remains in applicable to existing ozone nonattainment areas until EPA determines that they attain that standard. See 62 FR 38873; revised § 50.9. Therefore these issues are not the subject of this rulemaking.

Comment E.3.: ADEQ states that it has been alleged that one of the primary reasons for retention of the 1-hour standard was the concern that repeal of the standard would also repeal the regulatory structure (containing mandatory emissions reduction measures for VOCs that were classification-based) for enforcement of the standard under CAA section 182. ADEQ contends that this reason for retaining the 1-hour standard does not apply in the case of the Phoenix nonattainment area because Phoenix has already adopted in law, and is implementing or will implement, the measures required by section 182 regardless of whether there is 1-hour standard and thus, there is no practical reason for retaining the standard as applied to the Phoenix nonattainment area.

Response: Phoenix has not attained the 1-hour standard. Therefore, under 40 CFR § 50.9, as revised, that standard will remain applicable to the area until EPA determines that the area has attained the standard. Moreover, as noted previously, the Phoenix nonattainment area has not complied with two of the most substantive requirements for serious areas: the requirements to demonstrate a 9-percent rate of progress and attainment by 1999.

Comment E.4.: ADEQ asserts that the language in the "Implementation Policy" clearly implies that EPA recognizes that it has the discretion to suspend enforcement of the 1-hour ozone NAAQS in certain circumstances. ADEQ cites statements in the "Implementation Policy" that it is EPA's interpretation that the 1-hour ozone NAAQS "should" continue to apply and that the "purpose of retaining the current [1-hour] standard is to ensure a smooth legal and practical transition to the new [eight-hour] standard." 62 FR 38424. ADEQ further cites the preamble to the final 8-hour NAAQS which states that the purpose of continuing the 1-hour NAAQS was "to facilitate continuity in public health protection during the transition to a new standard." 62 FR 38873. ADEQ contends that EPA has the authority to suspend further enforcement of the 1-hour ozone NAAQS in the Phoenix area and allow the state and local community to initiate the actions necessary to comply with the new 8-hour ozone NAAQS and that this authority is grounded in CAA section 172(a)(1), which "explicitly authorizes that EPA may establish a new classification system with respect to a revision of a NAAQS." (61 FR 65753) In addition, ADEQ argues that the ozone requirements in Subpart 2 of Part D of the Act are "clearly and explicitly tied to the 1-hour ozone NAAQS in existence at the time of the enactment of the 1990 amendments." 61 FR 65753 and 42 U.S.C. §§ 7511a-f. The State concludes that continued application of those requirements in light of the new 8-hour ozone NAAQS is not legally mandated and that "backsliding" should not be a concern because, as applied to the Phoenix ozone nonattainment area, the new 8-hour ozone NAAQS appears to be more stringent than the 1-hour ozone NAAQS.

Response: These comments raise issues analogous to those addressed above and, as such, are not appropriate for resolution in this rulemaking. Under the provisions of 40 CFR § 50.9, as revised, the 1-hour standard continues to apply to Phoenix. EPA does not believe that either these provisions or any other statutory or regulatory provisions authorize the suspension of the 1-hour standard. CAA section 172(a)(1) authorizes EPA to establish a new classification system for the 8-hour standard, but provides no basis for modifying the classification system established by Congress for the 1-hour standard in CAA section 181.

Comment E.5.: The commenters requested that EPA execute an agreement with the State of Arizona to act upon submitted SIP revisions within a fixed period of time based upon priorities identified by the State and to set a schedule for acting of future SIP revisions.

Response: Region 9 receives hundreds of requests each year to revise federally-enforceable State Implementation Plans (SIP) from over 40 different state and local air pollution agencies. These include requests to modify inventories, attainment demonstrations, and administrative, permit, and prohibitory regulations. Given the available resources, Region 9 is unable to review and act on each of these requests as quickly as it would like. As a result, the Agency relies on the state and local agencies to prioritize submittals so the most important ones to the state and local agencies can be acted on first. Region 9 does expect to take final action soon on several revisions submitted by Maricopa County and has recently contacted the Arizona air pollution agencies to request that they identify those submittals that need to be acted quickly in order to issue Title V permits or for other purposes. Region 9 will process submittals in the priority order requested by these agencies.

Comment E.6.: Commenters requested that EPA approve Arizona Administrative Code (A.A.C.) R18-2-310 (The Arizona Excess Emissions Rule) as a revision to the SIP.

Response: This comment is closely related to a lawsuit brought by the Arizona Mining Association with regard to EPA's interim approval of Arizona's Title V operating permit program. 61 FR 55910 (October 30, 1996) The parties involved in the suit have had constructive exchanges, which EPA expects to continue, on the appropriate treatment of the Arizona Excess emissions Rule during settlement discussions.

Comment E.7.: Commenters request that EPA adopt a realistic, streamlined national Prevention of Significant Deterioration (PSD) and New Source Review regulations.

Response: EPA recognizes that its current regulations governing the new source review programs mandated by both parts C (PSD) and D (NSR) of Title I of the Clean Air Act are a source of concern for many people. On July 23, 1996, EPA published proposed major revises to its PSD and NSR regulations (known as the NSR reform proposal). 61 FR 38250 EPA has received many comments on its proposal and is currently carefully reviewing and considering these comments as it develops the final rule. EPA's goal for that final to simplify its new source review regulations consistent with the Clean Air Act requirements for those programs.

Comment E.8.: Commenters request that EPA adopt a regulatory affirmative defense for sources with potential VOC emissions of from 50 to 100 tons per year that will apply to enforcement of the NSR requirements in ozone nonattainment areas that meet certain criteria. The commenters suggest that these criteria be: 1) the source is in compliance with all applicable VOC emission requirements, 2) stationary sources represent less than 10 percent of the anthropogenic VOC emissions for the area, and 3) the area

had adopted the primary mobile source VOC reduction requirements applicable to a serious ozone nonattainment area under CAA section 182(c).

Response: It appears that the commenters are attempting to ease the perceived regulatory burden that will be imposed on sources that emit between 50 and 100 tons of VOC per year as a result of the reclassification. EPA will study the proposal, but its initial response is that the commenters' suggested approach is not the most effective means for addressing the commenters underlying concerns. The Agency believes it would be more constructive to engage in a dialog regarding possible mechanisms for limiting sources' potential to emit to below the thresholds that trigger NSR. However, where a source's actual emissions exceed the major source threshold or the source is unable to reduce its potential to emit below the major source threshold, the source is subject to major NSR.

Comment E.9.: Commenters request that EPA clarify how the revise NSR provisions would be implemented in the Phoenix ozone nonattainment area. Commenters request that EPA, in particular, clarify: (1) how to calculate the 5-year contemporaneous period, particularly for previously minor sources that may not have adequate records of contemporaneous increases and decreases; (2) whether trivial increases (*e.g.*, less than one ton) in VOC and NOx must be included in the calculation of a "significant" emissions increase; and (3) how the special modification provisions of CAA section 182(c)(7) and (8) are to be implemented.

Response: EPA's current position regarding the implementation of the special modification provisions of CAA sections 182(c)(6), (7), and (8), including explanation of the contemporaneous period and the exclusion of trivial increases when calculating emissions increases, is set out in the preamble to the NSR reform proposal. 61 FR 38300 (July 23, 1996). In most cases, creditable increases and decreases during the contemporaneous period are identified by reviewing company records, evaluating onsite construction activities and process changes, and tracking minor source construction permit activity at the source during the contemporaneous period.

With respect to trivial emissions increases, although EPA did not propose in the NSR reform proposal to find a particular level of emissions to be acceptably treated as trivial, it is likely that increases of less than one ton of VOC or NOx in a serious ozone nonattainment area would be acceptable. If Maricopa adopts such a provision in its NSR rule and submits it to EPA, the Agency will consider it; however, the submittal would have to be accompanied by demonstration that the level adopted by the District is trivial and of no consequence in furthering the statutory purpose. The demonstration would need to be supported by sufficient scientific evidence and analysis.

Comment E.10.: Commenters request that EPA continue to expeditiously act to approve the Arizona Clean Burning Gasoline Program

Response: EPA has been very pleased to support Arizona's efforts to bring reformulated gasoline to the Phoenix area. In addition to approving the Governor's request to join the federal program and the State's request for lower RVP limits, the Agency participated in the development of the new CBG rules in order to correct any approval problems early in the process. EPA is now working closely with ADEQ to act on the recent submittal of the CBG rules. This work is among EPA's highest priorities.

F. Other Comments

Comment F.1.: Senator Kyl and Representative Shadegg [20] comment that by using data collected from 1994 through 1996 as the basis for its decision, EPA has not taken into account the significant and positive effects of the RFG program and other actions taken by the State of Arizona to reduce ozone pollution and that this results in an inaccurate and unwarranted reclassification of Phoenix to serious. They comment further that this violates principles in President's July 18, 1997 memorandum that "implementation of the air quality standards is to be carried out to maximize common sense, flexibility, and cost effectiveness."

Response: EPA agrees that the 1994-1996 data do not reflect the 1997 implementation of the RFG program and that this program will have a continuing positive effect on ozone levels in the Phoenix area. EPA, however, is constrained by statute from considering 1997 data in its finding of failure to attain and denial of the extension request.

CAA section 181(b)(4) requires EPA to determine if an area has attained "as of the attainment date." For Phoenix, the attainment date is November 15, 1996, and under long-established procedures, determining attainment as of that date requires reviewing data from the three years immediately preceding that date or 1994 through 1996. 40 CFR § 50.9 and Part 50, Appendix H.

The criterion for extensions in CAA section 181(a)(5)(B) is that "no more than one exceedance of the [ozone standard] has occurring in the area in the year preceding the Extension Year." The extension year is 1997, thus the "year preceding" is 1996. Thus, EPA must evaluate 1996 ambient air quality in determining whether to grant an extension.

Comment F.2.: MCESD expressed concern about its ability to issue Title V permits for the 20 to 25 additional sources that will become subject to the program upon reclassification and asked what was the permitting deadline for these new sources.

Response: The "additional facilities" will become subject to Title V on the effective date of the reclassification. Under the CAA and part 70, sources newly subject to Title V have one year to submit a permit application from the time that the source becomes subject to Title V or on or before such earlier date as the permitting authority may establish. Maricopa County's regulations, however, currently do not include application deadlines for sources newly subject to Title V. This was identified as a program deficiency in EPA's notices that proposed and finalized interim approval of the Maricopa County title V program (60 FR 36090, July 13, 1995; 61 FR 55915, October 30, 1996). Maricopa submitted comments to EPA that it intends to revise its rules to correct this problem. The rule changes are due to EPA by May 30, 1998. Once this correction is made to state law, sources will have one year (or less, if Maricopa regulations require it) to apply for title V permits. The permitting authority must take final action on the permit application within 18 months of receiving a complete application. *See* CAA section 503(c) and 40 CFR 70.7(a)(2). Maricopa County's regulations also provide for this permit issuance deadline. *See* Maricopa County Air Pollution Control Regulations, Regulation II, Rule 210, section 301.9 f. MCESD would therefore have up to two and a half years (perhaps less if the revised District regulations establish earlier application submission deadlines or if sources submit their applications early) after the District regulations are revised to issue title V permits to these additional facilities. In recognition of this upcoming change in state law to establish application deadlines for sources newly subject to Title V, sources would be well advised to begin the process of preparing title V applications or securing synthetic minor limits.

Comment F.3.: MCESD [8] asked if EPA's policy regarding synthetic minor sources (the potential to emit transition policy) will be extended beyond next July. The Department noted that such an extension would give the Department additional time to issue synthetic minor permits to sources that become major under the reclassification.

Response: The policy Maricopa refers to allows permitting authorities to treat the following types of sources as non-major: 1) sources that maintain records demonstrating that their actual emissions do not exceed 50 percent of any applicable major source threshold for every consecutive 12-month period since January, 1994; and 2) sources that have actual emissions between 50 and 100 percent of the applicable major source threshold, but are subject state-enforceable requirements that limit emissions to below the major source threshold and are enforceable as a practical matter. The policy is due to expire on July 31, 1998. EPA is currently considering whether to extend this policy, but has not yet made a decision. If the policy is not extended beyond July, 1998, a source that had been treated as non-major under the policy, but is otherwise major after July, 1998 without the policy, would have one year from the policy expiration date to either apply for a Title V permit or to limit its potential to emit to below the major source threshold through practicably enforceable mechanisms.

For the most part, the result of the lowering of the major source threshold, which will drop the actual emission cutoff from 50 tpy to 25 tpy, will be to make fewer sources eligible for the the first ("actuals") option set out above. However, a source that previously relied on state-enforceable limits (e.g., limits between 50 and 100 tpy - see second option above) may not wish to revise its permit and will choose instead to avoid title V applicability based on having actual emissions of less than 25 tpy. The potential to emit transition policy requries that a source wishing to qualify for treatment under the "actuals" option above must maintain records demonstrating that its actual emissions have not exceeded 50 percent of the major source threshold for every consecutive 12-month period beginning January, 1994. EPA expects that sources already taking advantage of this aspect of the policy, and that remain eligible after reclassificaton, will have records dating from 1994 that accurately quantify their emissions. The policy does not, however, explicitly address the situation where a reclassification may prompt sources to opt-in to relying on actual emissions to avoid title V. EPA is in the process of determining from which point these records must have been maintained and will let Maricopa know as soon as it comes to a decision.

Upon reclassification, sources that had previously taken advantage of the policy may become ineligible for coverage under the policy. For example, prior to reclassification a source that is limited to emitting 90 tpy of VOC by state-enforceable limits would qualify for treatment as a non-major source in a moderate ozone nonattainment area (where the major source threshold is 100 tons per year). Upon redesignation, if that source is unable to accept state-enforceable limits that would limit its emissions to below 50 tpy (the major source threshold in a serious ozone nonattainment area), it would no longer be eligible to be treated as a non-major source. A source has one year from the date it becomes ineligible for coverage under this policy (or otherwise becomes major) to apply for a title V permit.

Other sources may need to obtain state-enforceable limits to retain eligibility. For example, a 45 tpy VOC source that does not have state-enforceable limits was, prior to reclassification, required only to keep records to demonstrate its emissions were less than 50 percent of the major source threshold. In a serious ozone nonattainment area, wherein the major source threshold for VOC will become 50 tpy, this source would need enforceable limits on its potential to emit to qualify for coverage under the transition policy and would be required to either obtain state-enforceable limits (if the transition policy were to be

extended), obtain state-issued federally-enforceable limits on its potential emissions, or apply for a title V permit within one year of the reclassification.

Comment F.4.: MCESD [8] notes the serious area requirement for photochemical assessment monitoring stations (PAMS) and states that it does not have the resources to implement this requirement. MCESD asked if EPA will provide funds and if special studies would be more cost-effective.

Response: EPA recognizes that the PAMS requirements, codified at 40 CFR §§58.40-58.46, can be complex and expensive. Historically, EPA has provided states with supplemental CAA section 105 grant funding to support the PAMS program. Although EPA cannot assure the availability of future funding, EPA hopes to continue to provide grant support for the PAMS program. EPA will work with the County as it implements the PAMS requirement to ensure a cost-effective program.

Comment F5: MCESD [8] expressed concern about the overlap between upcoming maximum achievable control technology (MACT) standards and RACT controls for a number of source categories that will be newly subject to RACT as a result of the reclassification. These source categories include pharmaceuticals, boat manufacturing, and reinforced plastics composite manufacturing. The County notes that local industries have been very concerned with the imposition of two different sets of standards in a relatively short time and raise compatibility issues and that many of these industries have already implemented controls through their pollution prevention programs. The County contents that the RACT requirements may result in the expenditure of significant resources simply to codify existing levels of controls resulting in very small to no additional emission reductions.

Response: EPA appreciates MCESD raising this concern and will work with the Department to to minimize the regulatory changes facing sources subject to both RACT and MACT standards while assuring that the requirements of each program area met.

APPENDIX A

AIRS DATA SHEET FOR 1994-1996

PLEASE CONTACT FRANCES WICHER AT (415) 744-1248

TO OBTAIN A COPY OF THESE TABLES.

APPENDIX B

LIST OF OZONE EXCEEDANCES IN PHOENIX 1994-1996

(source: Arizona Department of Environmental Quality)

1994-1996 PHOENIX OZONE EXCEEDANCES								
Site Address	1994		1995		1996		1994-1996 Total Exceed-ances	1994-1996 Estimated Exceed-ances
	Number of Exceed-ances	Date/ Concen-tration	Number of Exceed-ances	Date/ Concen-tration	Number of Exceed-ances	Date/ Concen-tration		
South Phoenix (South Central)	0	-	1	8/31 - 0.142	0	-	1	0.3
Central Phoenix (E. Roosevelt)	0	-	0	-	0	-	0	0
Glendale (W. Olive)	0	-	0	-	0	-	0	0
West Phoenix (Earll Drive)	0	-	0	-	0	-	0	0
Maryvale* (W. Encanto)	-	-	0	-	0	-	0	0
North Phoenix (No. 6th)	1	7/29 - 0.132	3	8/29 - 0.130 8/31 - 0.142 9/01 - 0.125	0	-	4	1.3
No. Scottsdale (N. Scottsdale)	0	-	0	-	0	-	0	0
Scottsdale (N. Miller)	0	-	0	-	0	-	0	0

Mesa (Broadway /Brooks)	0	-	3	8/02 - 0.126 8/29 - 0.127 9/01 - 0.127	1	7/23 - 0.127	4	1.3
Mesa* (S. Power Rd)	0	-	2	8/12 - 0.137 8/30 - 0.131	Site closed		2	0.7

* Special Purpose Monitor Source: ADEQ

1994-1996 PHOENIX OZONE EXCEEDANCES								
Site Address	1994		1995		1996		1994-1996 Total Exceed-ances	1994-1996 Estimated Exceed-ances
	Number of Exceed-ances	Date/ Concen-tration	Number of Exceed-ances	Date/ Concen-tration	Number of Exceed-ances	Date/ Concen-tration		
Papago Park* (N. 52nd St)	0	-	7	8/07 - 0.132 8/08 - 0.127 8/09 - 0.131 8/10 - 0.129 8/29 - 0.133 8/31 - 0.144 9/01 - 0.139	0	-	7	2.3
Pinnacle Peak* (N. Alma School)	1	6/28 - 0.138	0	-	0	-	1	0.3
Chandler (Price Road)	0	-	1	8/12 - 0.125	0	-	1	0.3
Phoenix Supersite* (N. 17th Ave.)	2	7/29 - 0.138	2	8/31 - 0.143 9/01 - 0.129	0	-	4	1.3
Phoenix VEI* (40th & Fillmore)	3	7/23 - 0.125 7/29 - 0.135 9/01 - 0.126	3	8/29 - 0.129 8/31 - 0.133 9/01 - 0.130	0	-	6	2.0
Mt. Ord* (USFS building)	0	-	2	8/02 - 0.126 8/31 - 0.137	1	5/21 - 0.130	3	1

1994-1996 PHOENIX OZONE EXCEEDANCES								
Site Address	1994		1995		1996		1994-1996 Total Exceed-ances	1994-1996 Estimated Exceed-ances
	Number of Exceed-ances	Date/ Concen-tration	Number of Exceed-ances	Date/ Concen-tration	Number of Exceed-ances	Date/ Concen-tration		
Blue Point* (Sheriff's station)	0	-	0	-	2	7/23 - 0.140 8/16 - 0.134	2	0.67
Falcon Field* (E. McKellips Rd)	1	8/04 - 0.130	2	7/08 - 0.130 8/02 - 0.134	1	7/23 - 0.139	4	1.3
Fountain Hills* (E. Palisades)	(not operating)	-	(not operating)	-	4	5/21 - 0.128 6/04 - 0.126 7/23 - 0.129 8/28 - 0.132	4	1.3
Salt River Pima (East Osborn)	2	8/04 - 0.145 8/12 - 0.125	2	7/08 - 0.130 9/01- 0.127	1	7/23 - 0.130	5	1.7

* Special Purpose Monitor Source: ADEQ

APPENDIX C

CALCULATIONS FOR TABLE 5

Page cites unless otherwise indicated are from *1990 Base Year Ozone Emission Inventory for Maricopa County, Arizona, Nonattainment Area*, Final Submittal, Maricopa County Environmental Quality & Community Services Agency, July 1993.

Total 1990 emissions not including biogenic sources) are 365 tpd or 730,000 ppd. See page 1-20.

Table 5 Categories that Emitted Less than 5% of the Total VOC Prior to Controls		
Source Category	Emissions from Source Category	% of the 1990 VOC Inventory
Wood coating	Point source categories 11 & 12 (p. 2-24) Wood furniture and factory finished wood area source categories (p. 1-12) (5,079 ppd + 4,167 ppd + 5,200 ppd + 2,354 ppd) = 16,800 ppd	2.3%
Graphic Arts	Point source category 19 (p. 2-27) Graphic arts source category (p. 1-12) 3,294 ppd + 7,868 ppd = 11,162 ppd	1.5%
Commercial bakeries	Point source category 7.5 (p. 2-22) Bakery area source category (p. 1-11) 1,685 ppd + 1067 ppd = 2,752 ppd	0.4%
Vehicle refueling (stage II vapor recovery)	Vehicle refueling area source category (p. 1-11) 25, 500 ppd	3.5%
Vehicle refinishing	Point source category 18 (p. 2-26) Auto refinishing area source category (p. 1-12) 194 + 6,951 ppd = 2,752 ppd	1.0%

APPENDIX D

HISTORY OF THE EVALUATIONS OF THE MARICOPA COUNTY AIR QUALITY MONITORING SYSTEM

History of the Evaluations of the Maricopa County Air Quality Monitoring System

In 1989, EPA Region 9 conducted a program evaluation of the Maricopa County Air Pollution Control Program. One of the areas evaluated was the County's ambient air monitoring system. In regards to the monitoring system, EPA found that the then-current (1989) ozone network did not included a site which met the 40 CFR Part 58 requirements for a maximum concentration (category A NAMS) monitor." Evaluation of the Maricopa County Air Quality Program", U.S EPA Region 9, September 1989, p. 55 ("1989 Program Evaluation"). The discussion in EPA's evaluation included the following citation from 40 CFR Part 58, appendix D, section 2.5:

The emission inventories should be used to define the extent of the area of important non-methane hydrocarbons and NOX emissions. The most frequent wind speed direction for periods of important photochemical activity should be determined. Then the prospective monitoring area should be selected in a direction from the city that is most frequently downwind during periods of peak photochemical activity. The distance from the station to the upwind edge of the city should be about equal to the distance traveled by air moving for 5 to 7 hours at wind speeds prevailing during periods of photochemical activity. Prospective areas for locating ozone monitoring should always be outside the area of major NOX emissions. 1989 Program Evaluation, pp. 55-56

The discussion also noted the fact that the County had not conducted this evaluation of its network to determine a maximum concentration site. The discussion continues by referencing a map of the metropolitan area which shows that there is no ozone monitor downwind of the city and outside the influence of major emission sources. The 1989 program evaluation began an eight-year effort by EPA to have Maricopa County evaluate and revise its ozone network to meet the requirements of 40 CFR Part 58. As of this date the County has still not revised the SLAMS ozone network.

In 1988, the Maricopa County ozone monitoring network consisted of ten sites, two classified as NAMS (Central Phoenix and South Scottsdale) and eight classified as SLAMS (North Phoenix, Glendale, North Scottsdale, South Phoenix, Mesa, West Phoenix, West Indian, and Pinnacle Peak). There were no special purpose monitors in operation at this time.

In response to EPA's 1989 program evaluation, Maricopa County developed a corrective action plan (CAP) to address the findings in EPA's program evaluation. The September 14, 1990 CAP addressed EPA's finding of ozone network deficiencies by establishing a number of special purpose ozone monitoring sites whose exact locations were not listed. The County also committed to conduct a formal study, including an assessment of County emissions and meteorology, to consider changes to its ozone monitoring network.

On December 3, 1990, Maricopa County forwarded its final ozone network review workplan to EPA. The workplan listed specific activities and target completion dates that the County would undertake to address the monitoring deficiencies found by EPA in its 1989 program evaluation. Activities included, but were not limited to, an analysis of surface wind data and the 1990 ozone season to determine downwind test sites, to be completed by January 15, 1991 and, based on the results of the analysis,

reconfigure the ozone network, if necessary, with State and EPA concurrence. This activity was to be completed by February 15, 1991. The workplan also listed the existing ozone SLAMS/NAMS sites and the ozone special study sites that the County and ADEQ were operating. There were fifteen sites in total: NAMS - Central Phoenix and South Scottsdale; SLAMS - North Phoenix, Glendale, North Scottsdale, South Phoenix, Mesa, West Phoenix, and Pinnacle Peak; SPMs - Estrella Park, Lake Pleasant, Black Canyon, Falcon Field, Papago Park (State site) and Vehicle Emission Station (State site). Much of the workplan was not carried out. See, *Memorandum,* "Maricopa County Ozone Network Review," Kimberly Lopez, EPA-Region 9 to John Kennedy, Chief, Compliance and Oversight Section, EPA-Region 9, July 16, 1991 and *Memorandum,* "Maricopa County Ambient Air Monitoring Program," Kimberley Lopez to Julia Barrow, Chief, Air Quality Section, EPA-Region 9, March 11, 1992.

In July 1992, EPA issued its report on its re-evaluation of the Maricopa County Air Pollution Control Program. EPA again reviewed the adequacy of the ozone network and found that the inadequacies noted in the 1989 program evaluation had still not been fully addressed. See Re-Evaluation of the Maricopa County Air Quality Program, EPA Region 9, July 1992, p. 14 (1992 Re-Evaluation). The final report on the ozone network review, which relied on data collected by the County and ADEQ during the 1991 ozone season, had not been completed because the County was now questioning the validity of the ozone data collected. 1992 Re-Evaluation, p. 18. At the time of the re-evaluation report, no changes had been made to the ozone SLAMS network.

In March 1993, Aeroenvironment, Inc., (which had been hired by the County to develop recommendations for addressing EPA's findings in the program evaluations) issued its Phase I report. While the report discusses EPA's finding that the County network lacks a maximum concentration ozone site, it did not recommend a new site to address this deficiency. It simply stated that finding such a site in the Phoenix area is difficult. The final recommendation was to locate a site at or near ADEQ's SPM site at the Vehicle Emission Laboratory.

In May 1993, Aerovironment, Inc. issued its "Phase II Recommendations for Maricopa County Air Quality Monitoring Network". EPA reviewed the report and made the following comments in a letter to the County dated June 11, 1993:

It seems to EPA Region IX that the Phase II recommendations should be based on the overall goals of the [Maricopa County] monitoring program, or they should be used as a basis to develop the [County's] monitoring goals. It was not apparent in the report what, if any, the monitoring goals of the [County] are."

The report did not contain any specific recommendations on addressing the ozone network deficiencies. In 1993 the ozone SLAMS/NAMS network was nearly the same as the 1988 network, with Pinnacle Peak replacing the Indian School site and the addition of four SPMs - Falcon Field, Central Arizona Project, Lake Pleasant, and Maryvale. ADEQ also operated SPMs in Phoenix at three sites: Vehicle Emission Laboratory, Salt River Pima, and Papago Park (also know as Civil Defense).

In October 1993, the County finally issued a draft ozone evaluation report. The report contained an extensive modeling analysis which indicated that ozone air pollution tends to concentrate to the east of the Phoenix metropolitan area. Additional SPMs were proposed in the report. Some but not all of the proposed sites were eventually established.

Since 1993, Maricopa County has established various SPMs but has never incorporated any of these monitors into its SLAMS/NAMS network. The last network review received from Maricopa County in 1997 was for the year 1995. It listed the following sites for the ozone network: NAMS - Central Phoenix and South Scottsdale; SLAMS - South Phoenix, West Phoenix, Glendale, Mesa, North Phoenix, Pinnacle Peak; SPM - Falcon Field, Emergency Management, West Chandler, Maryvale, Blue Point, and Mount Ord. Fountain Hills was a new SPM site established in April, 1996. The SPM sites operated by Maricopa County meet all of the siting criteria in EPA regulations as well as the quality assurance requirements in 40 CFR Part 58, appendix A. ADEQ also operates several SPM sites: Salt River Pima in the eastern Phoenix metro area, the Supersite in central Phoenix, and another site at 36448 West Elliot which is to the west of the Phoenix metropolitan area. The network for the Phoenix metropolitan area currently consists of more SPM sites (9) than SLAMS/NAMS sites (8).

In a letter to the County dated February 10, 1997 EPA again asked the County to designate certain SPM sites as SLAMS. As requested by the County, the letter included a protocol for designating sites as SLAMS, although, as stated in the letter, no formal approval by EPA is required to designate a site as SLAMS. On April 15, 1997, Al Brown, Director, MCESD, requested additional time for designating the SPMs to SLAMS to allow time for the State to convene a stakeholder process to educate and solicit comments from the public and regulated community on changes to the State monitoring networks. Mr. Brown requested that a decision on designating as SLAMS the SPM sites Maryvale, Emergency Management, West Chandler, and Fountain Hills be deferred until June 30, 1997. Decisions on these sites have still not been made.